

Supporting Information

Structural elucidation of azo and quinoneimine products formed in diazonium-based color reactions of cannabinoids

Hikari Nishiguchi ¹, Kayo Nakamura ^{1,*}, Ryosuke Arai ¹, Riho Hamajima ¹, Hiroko Abe ², Akihiko Ishida ³, Manabu Tokeshi ³, Kyohei Higashi ¹, Akiyoshi Saitoh ¹ and Hideyo Takahashi ^{1,*}

¹ Faculty of Pharmaceutical Sciences, Tokyo University of Science, 6-3-1 Niijuku, Katsushika-ku, Tokyo 125-8585, Japan

² BioDesign Inc., IB Daiichi-Bld 6th floor, 3-25-15 Nishi-Ikebukuro, Toshima-ku, Tokyo 171-0021, Japan

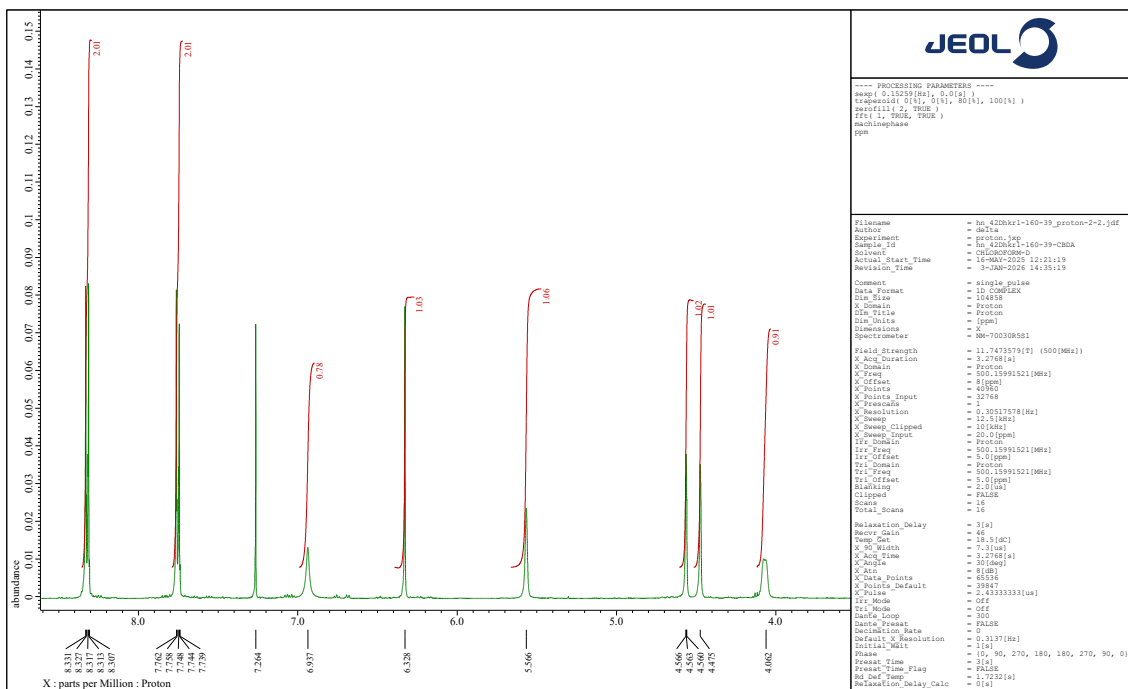
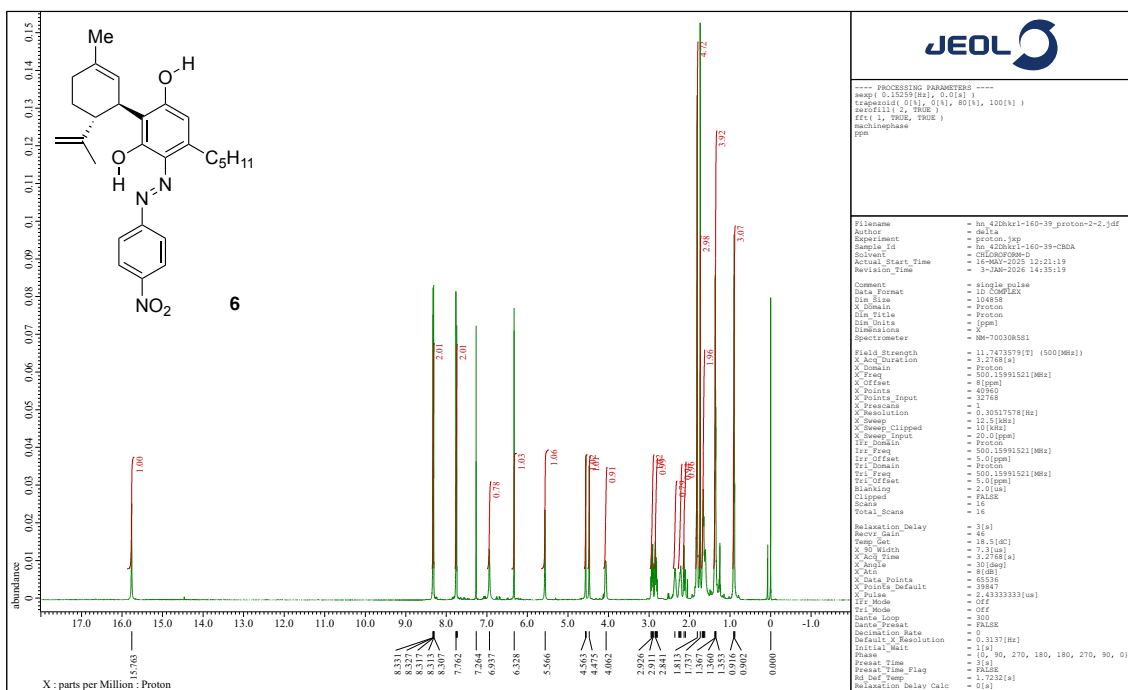
³ Faculty of Engineering, Hokkaido University, Kita 13, Nishi 8, Kita-ku, Sapporo 060-8628, Japan

kayo_nakamura@rs.tus.ac.jp, hide-tak@rs.tus.ac.jp

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Figure S1. ^1H NMR (500 MHz, CDCl_3 , ppm) of **6**



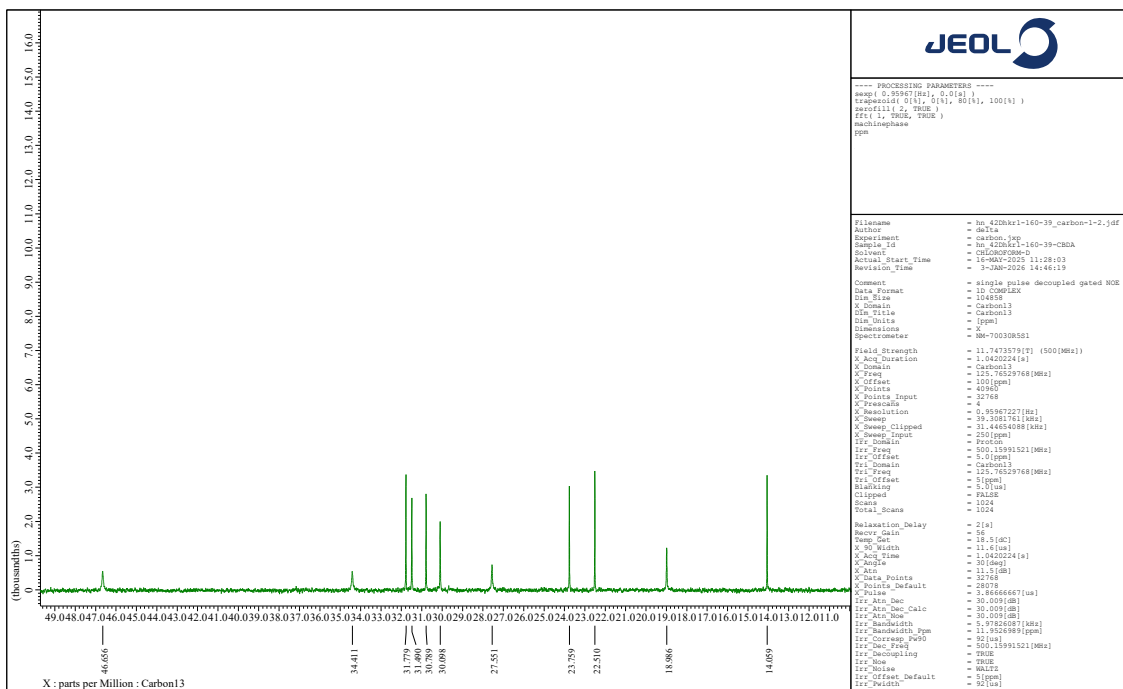
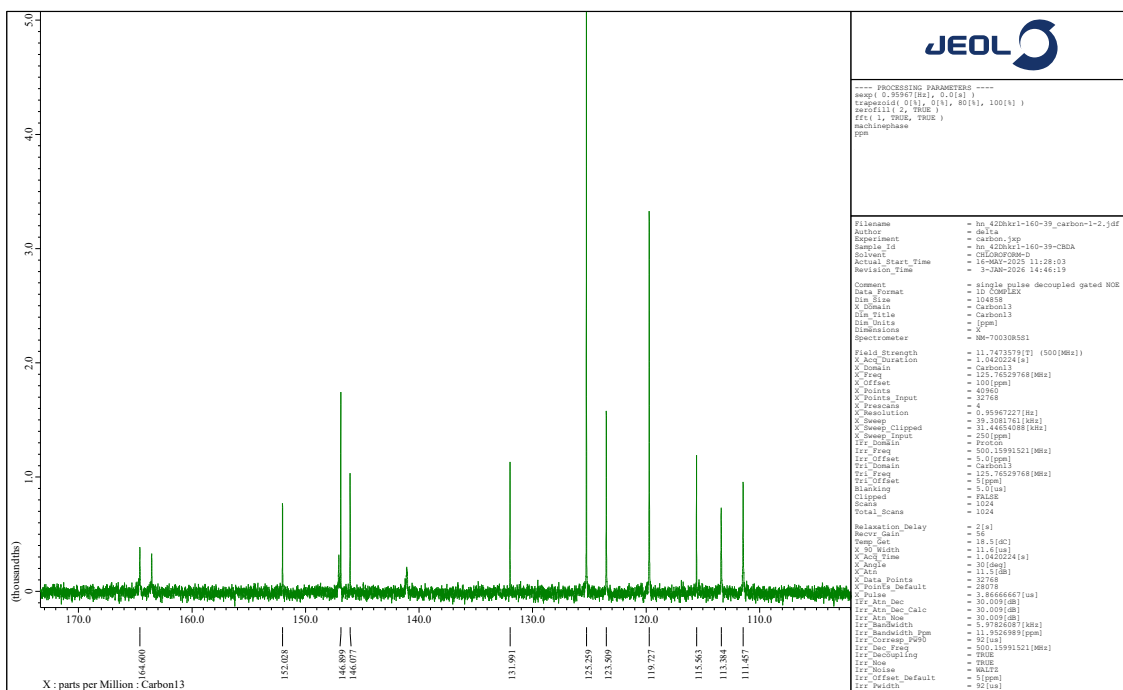


Figure S3. COSY spectrum of **6**

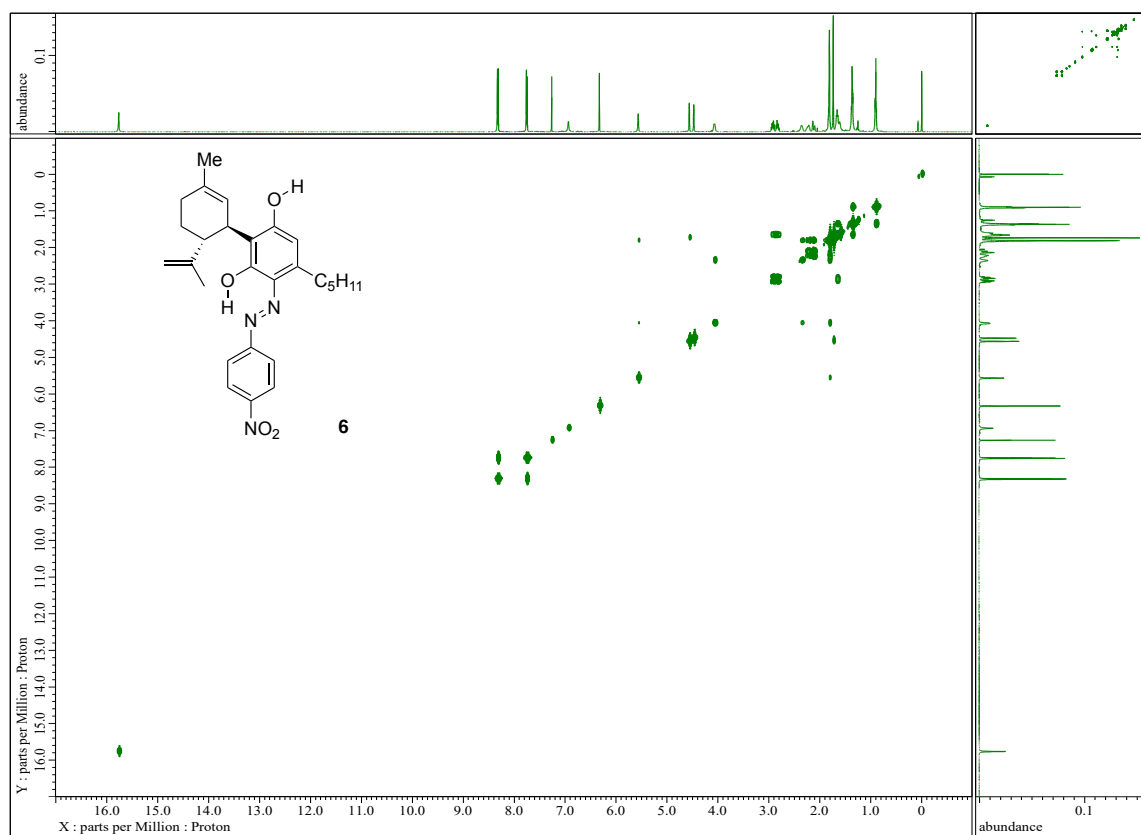


Figure S4. HSQC spectrum of **6**

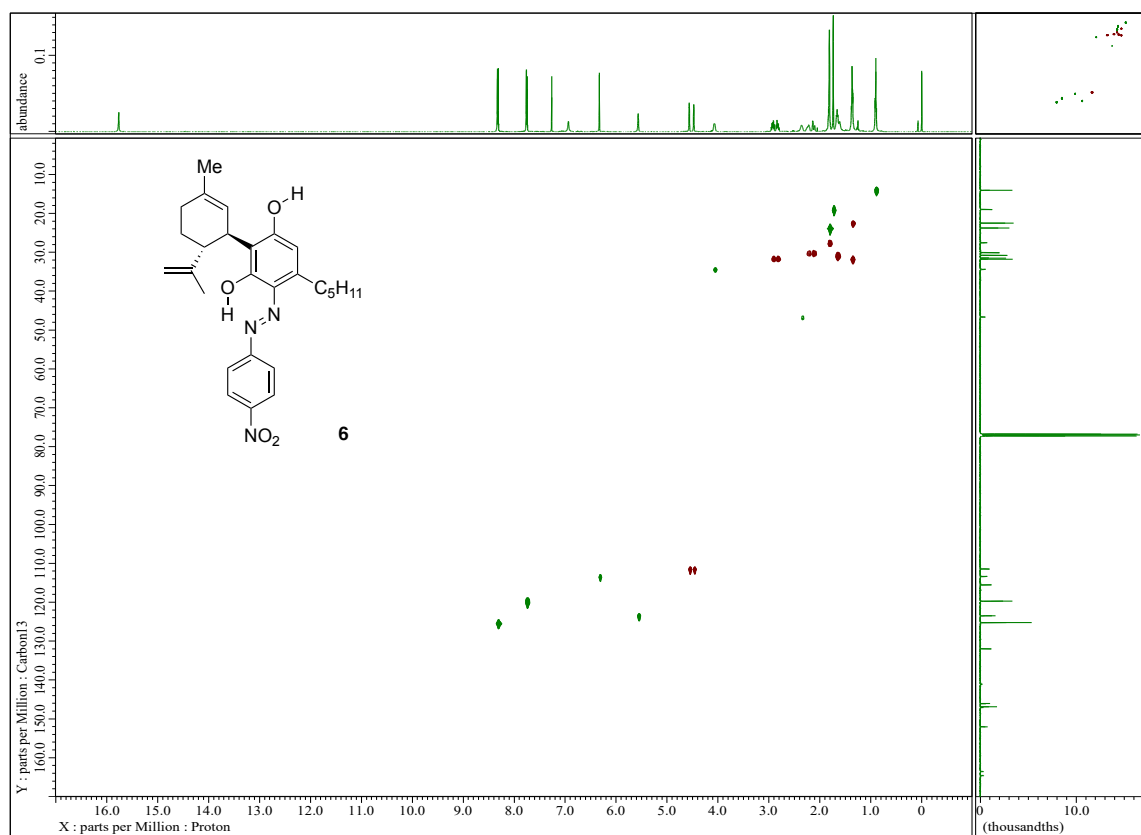


Figure S5. HMBC spectrum of 6

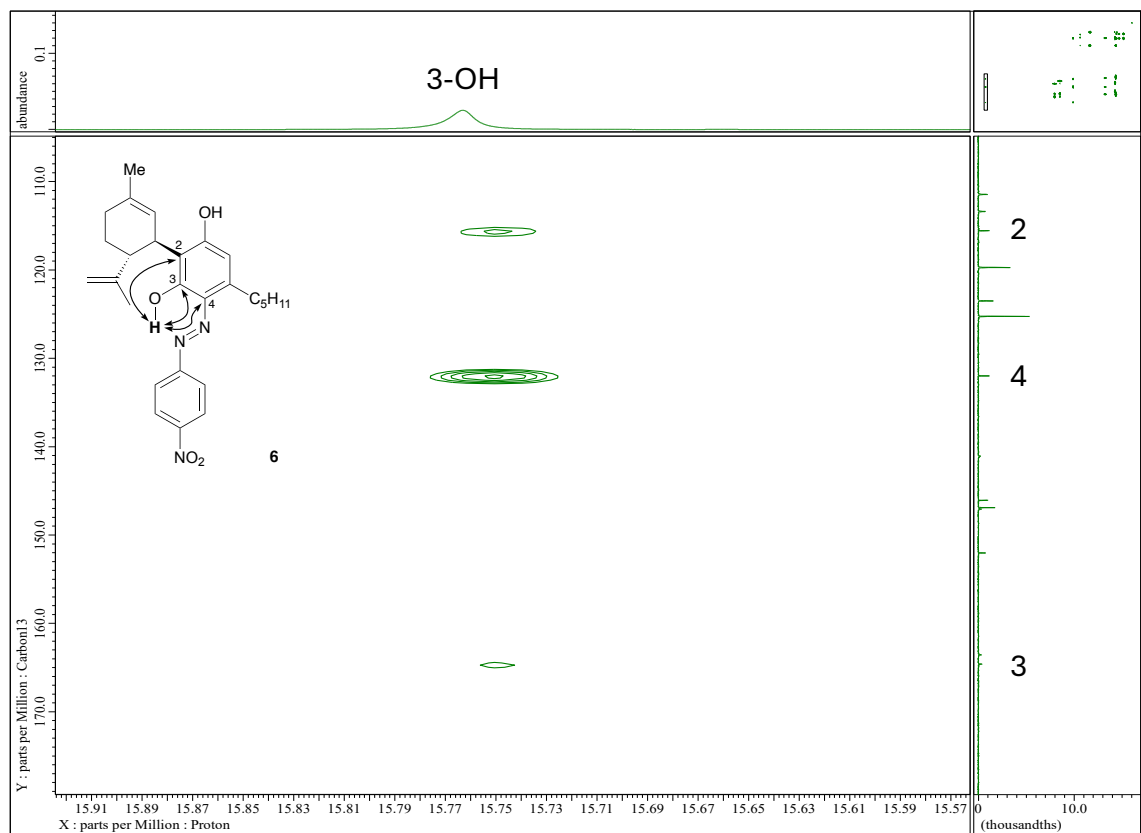
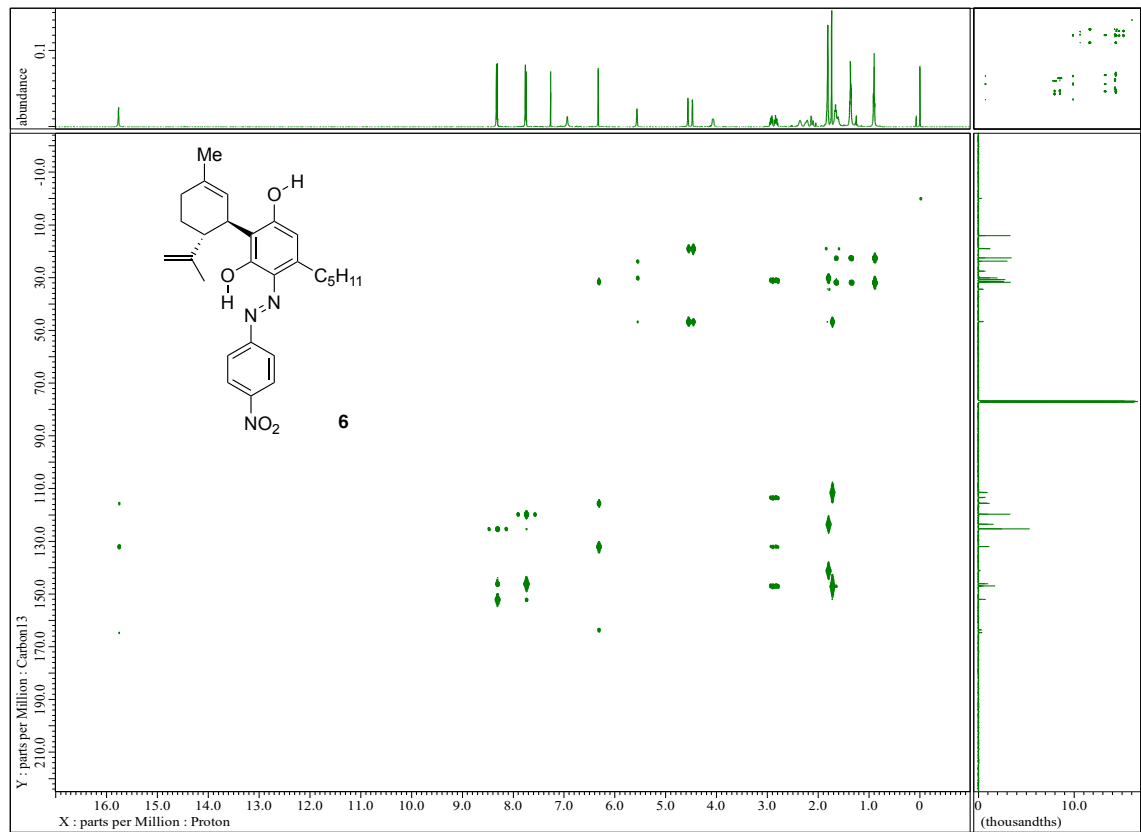


Figure S6. ROESY spectrum of **6**

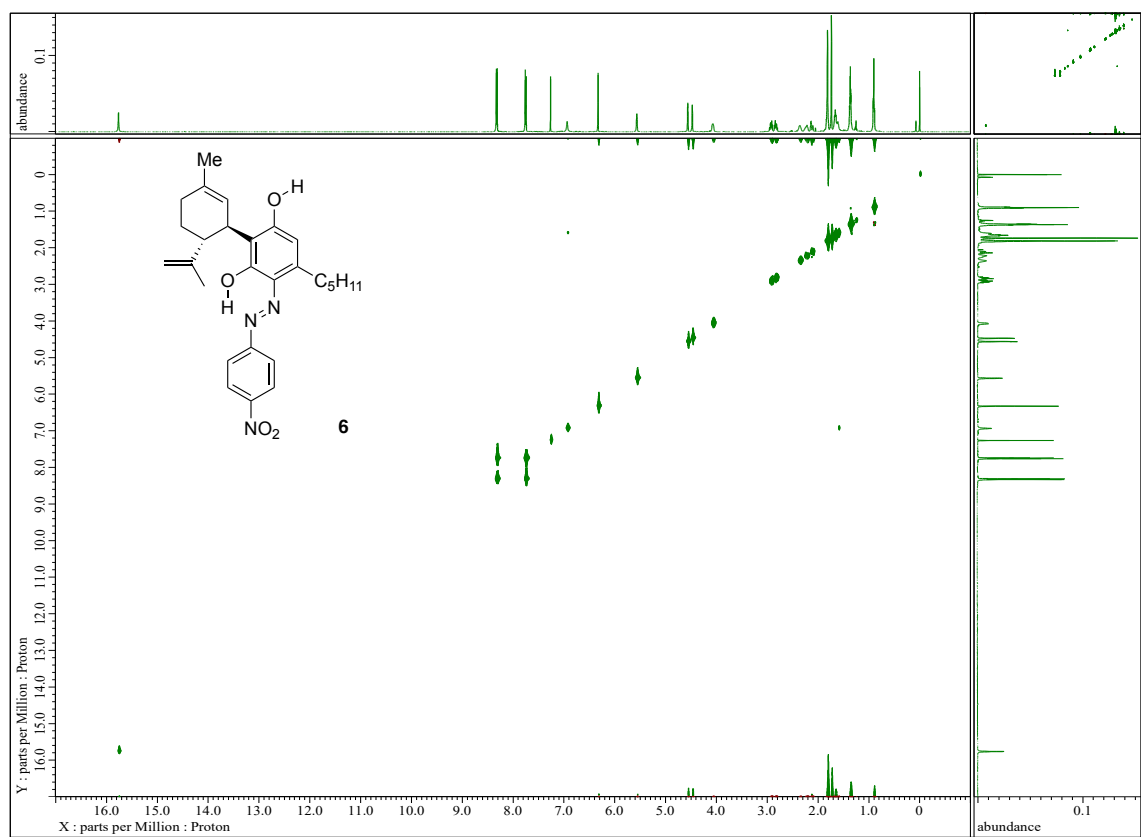
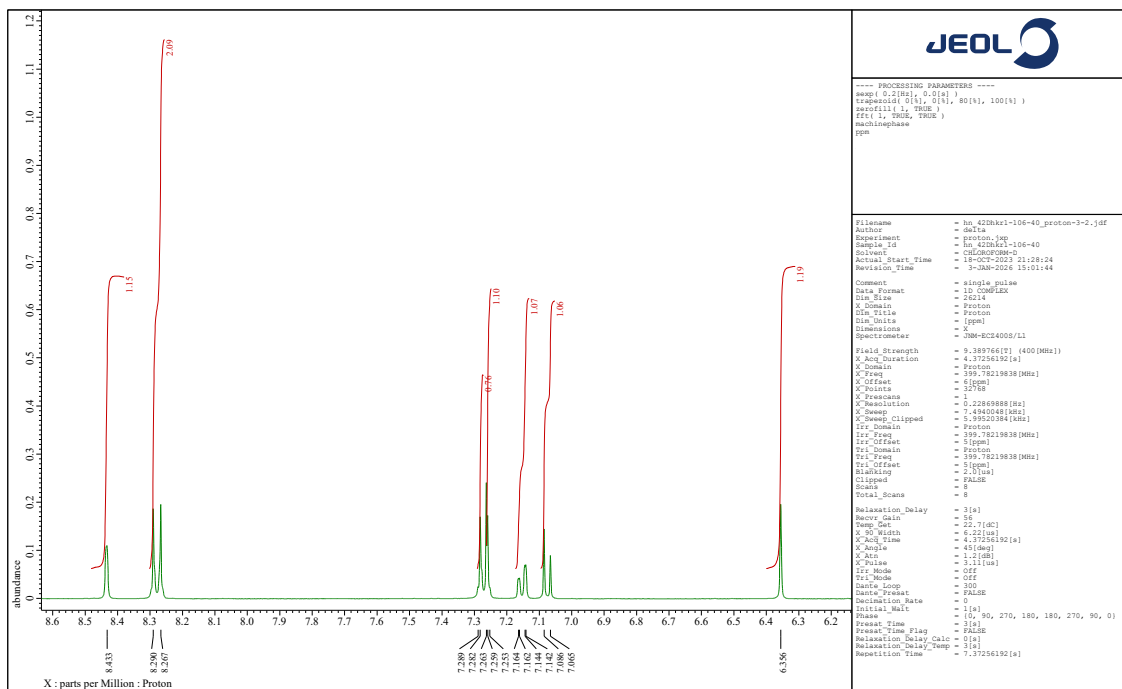


Figure S7. ^1H NMR (400 MHz, CDCl_3 , ppm) of **7**



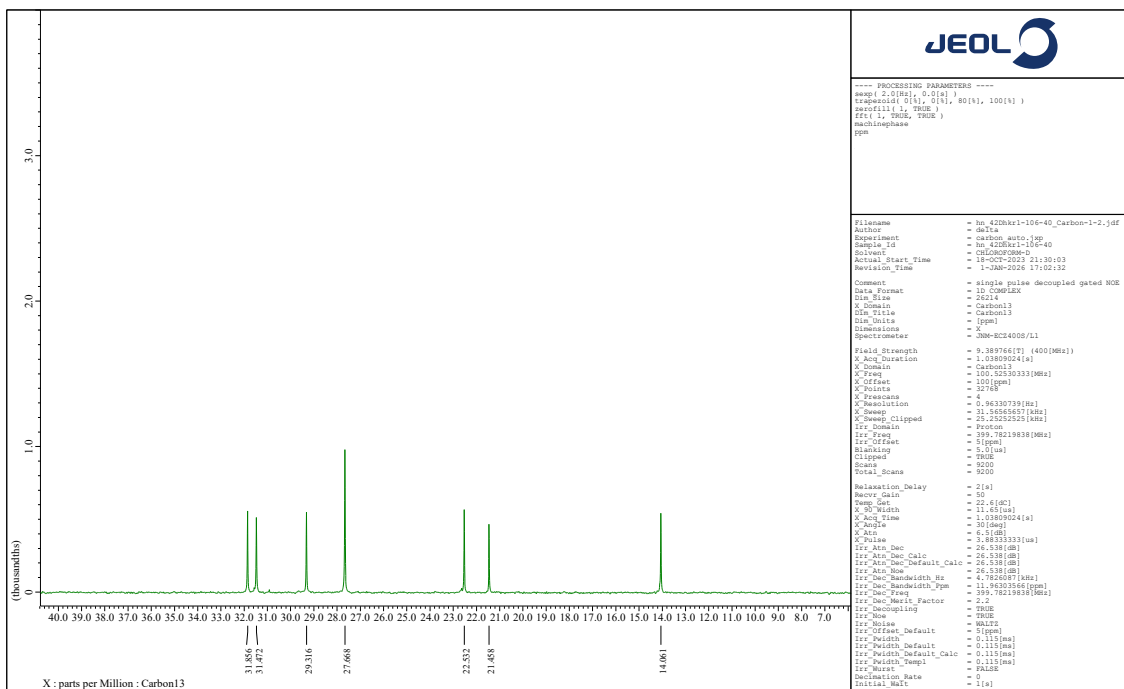
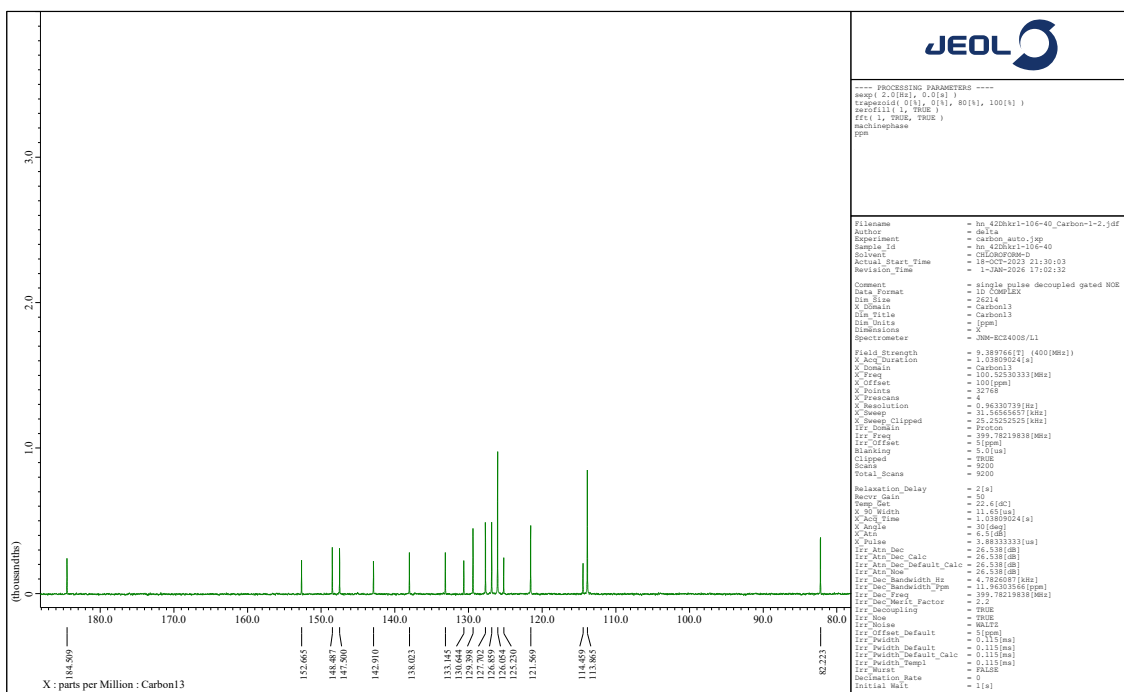


Figure S9. COSY spectrum of 7

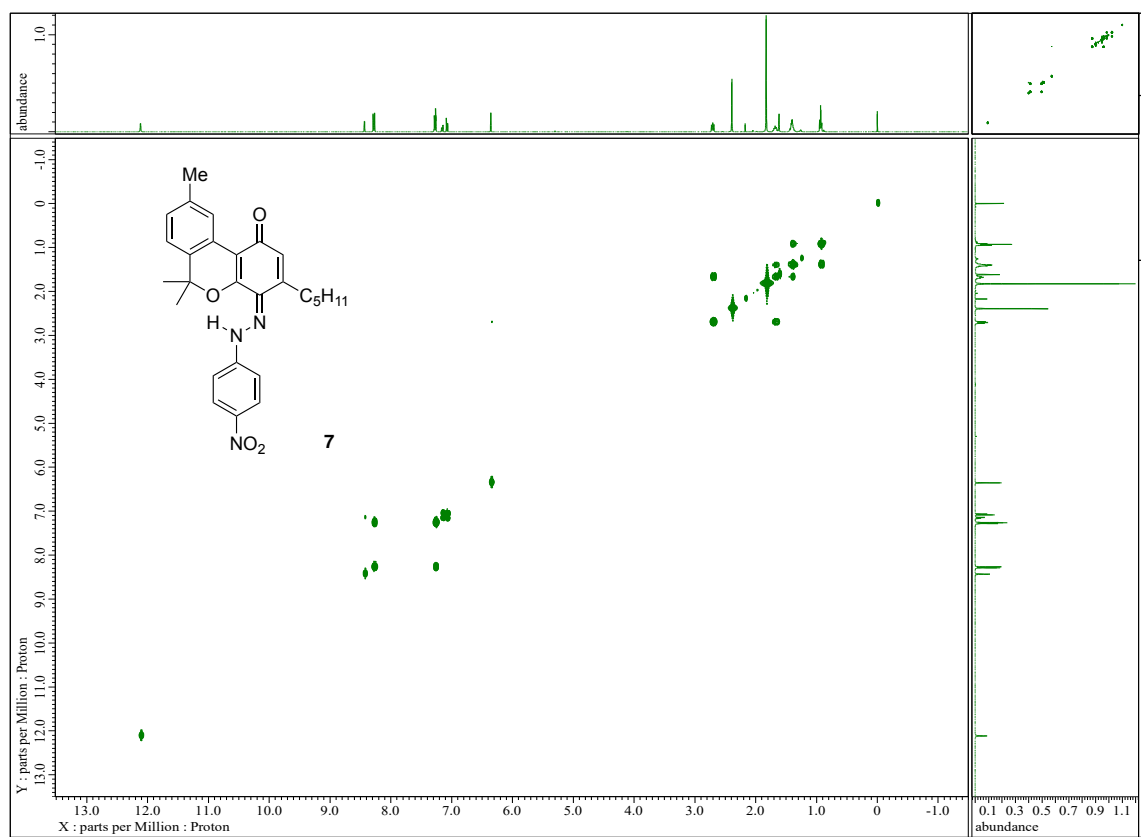


Figure S10. HSQC spectrum of 7

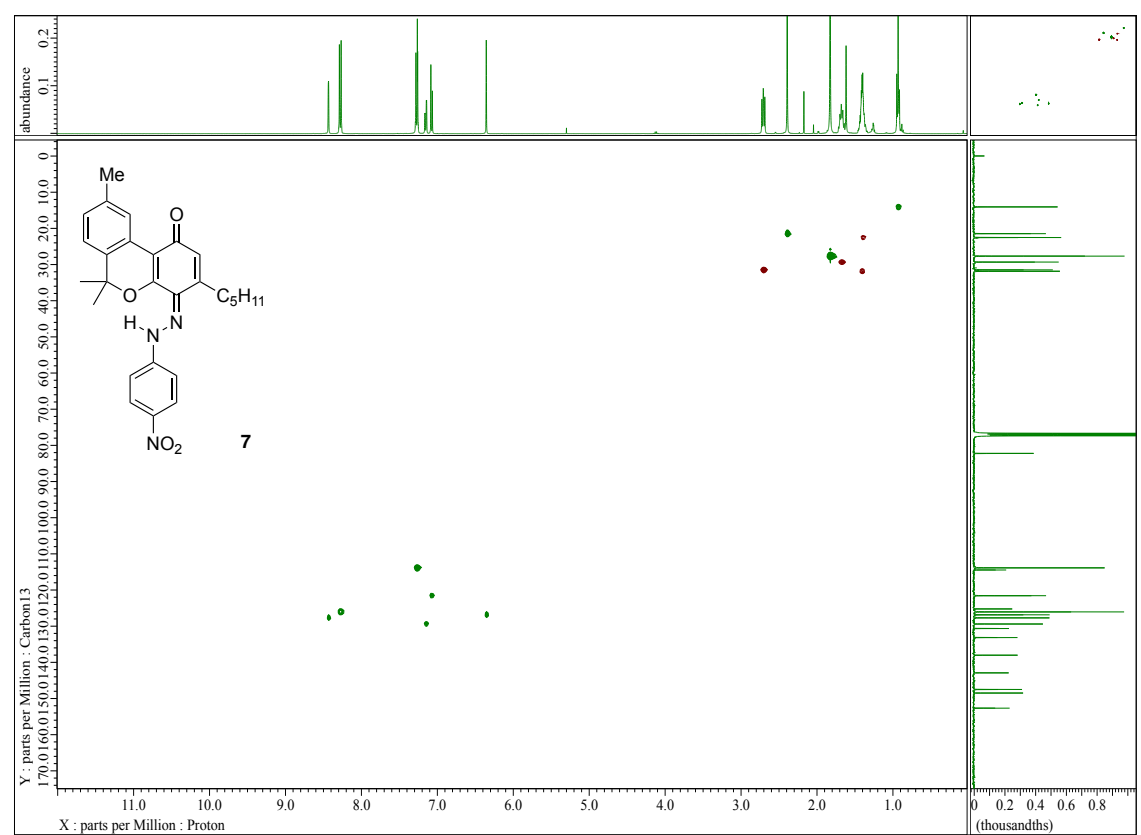


Figure S11. HMBC spectrum of 7

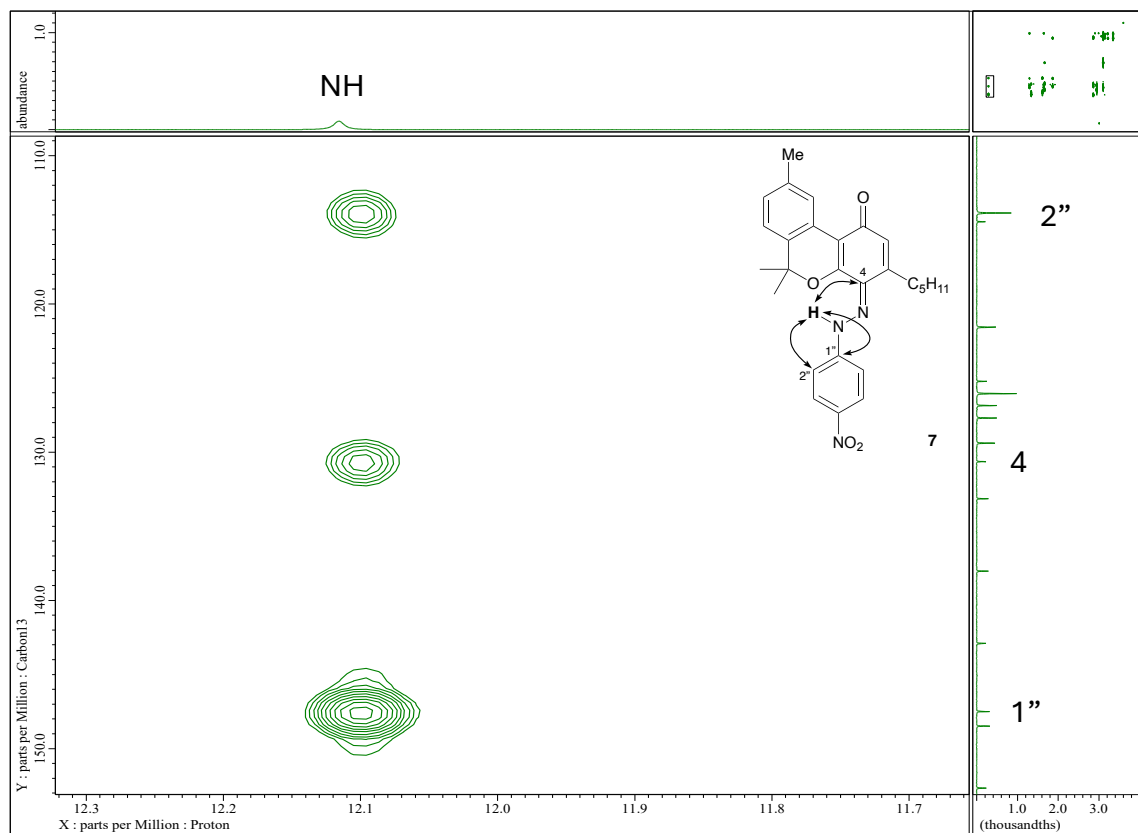
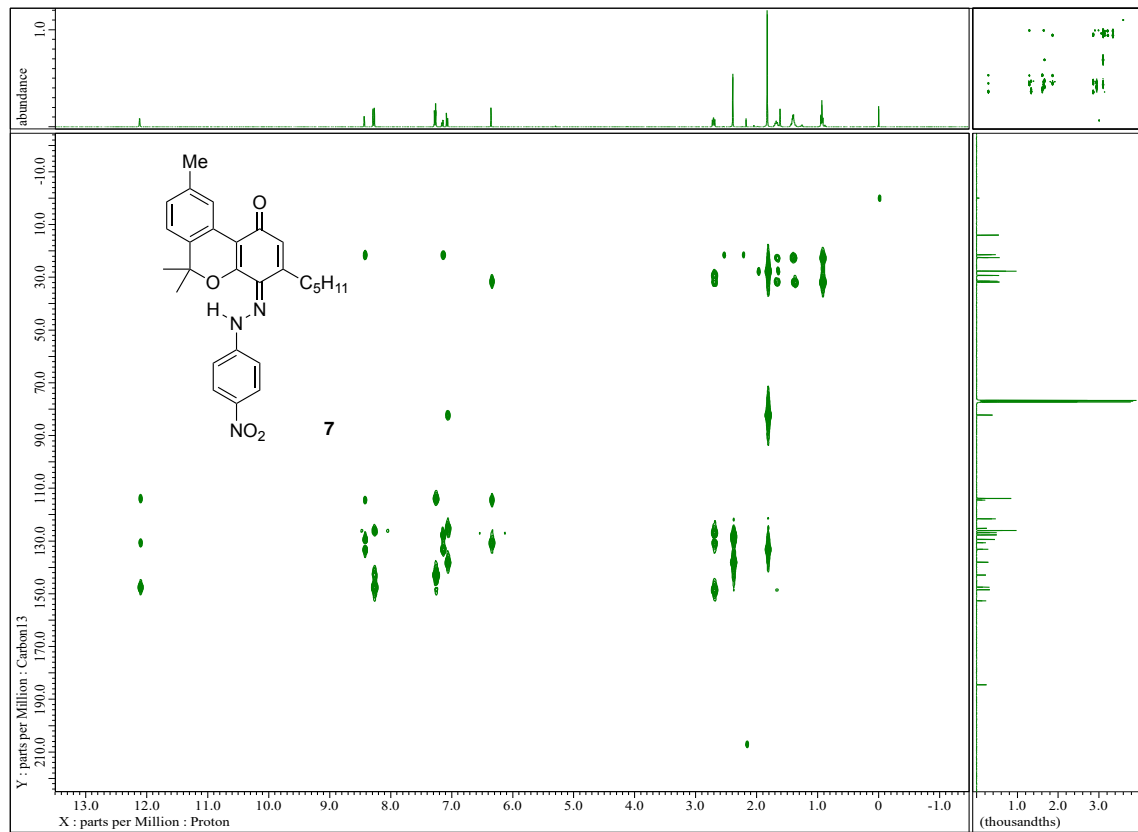


Figure S12. NOESY spectrum of **7**

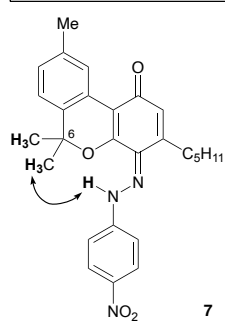
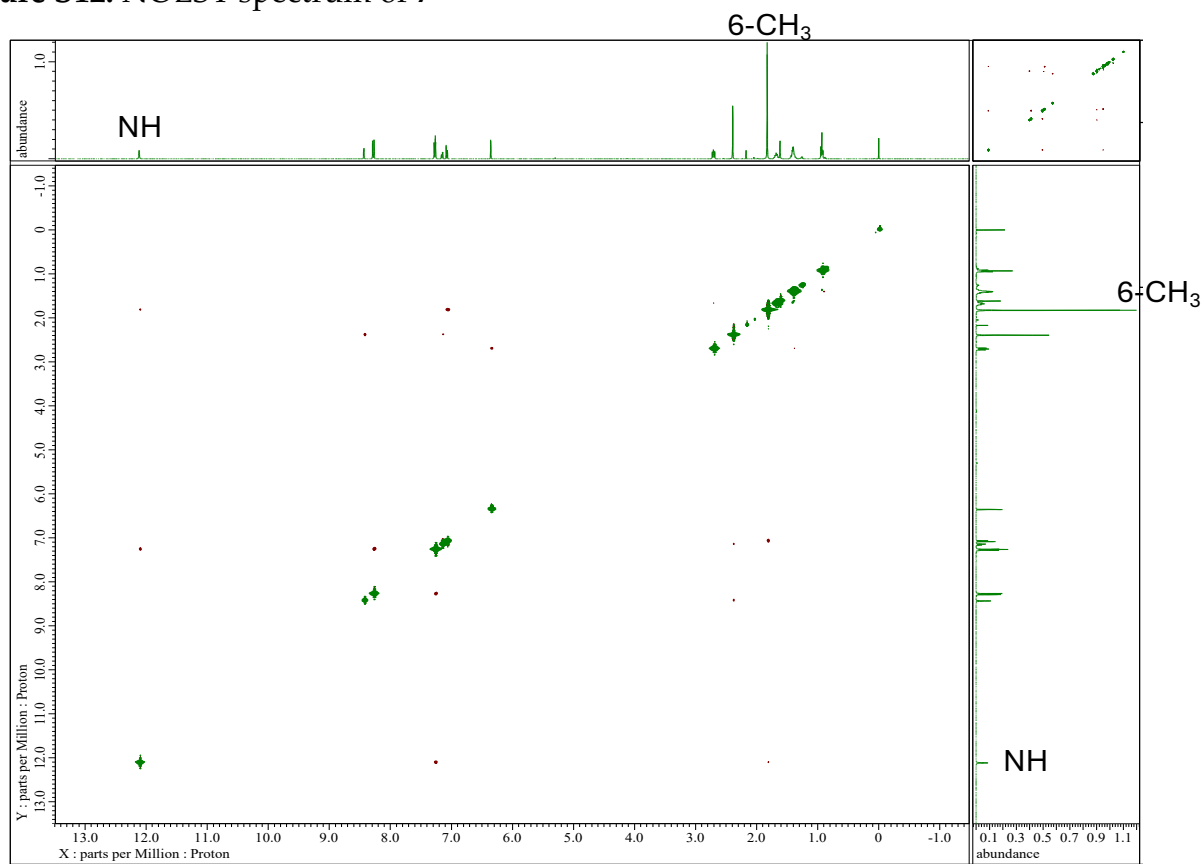
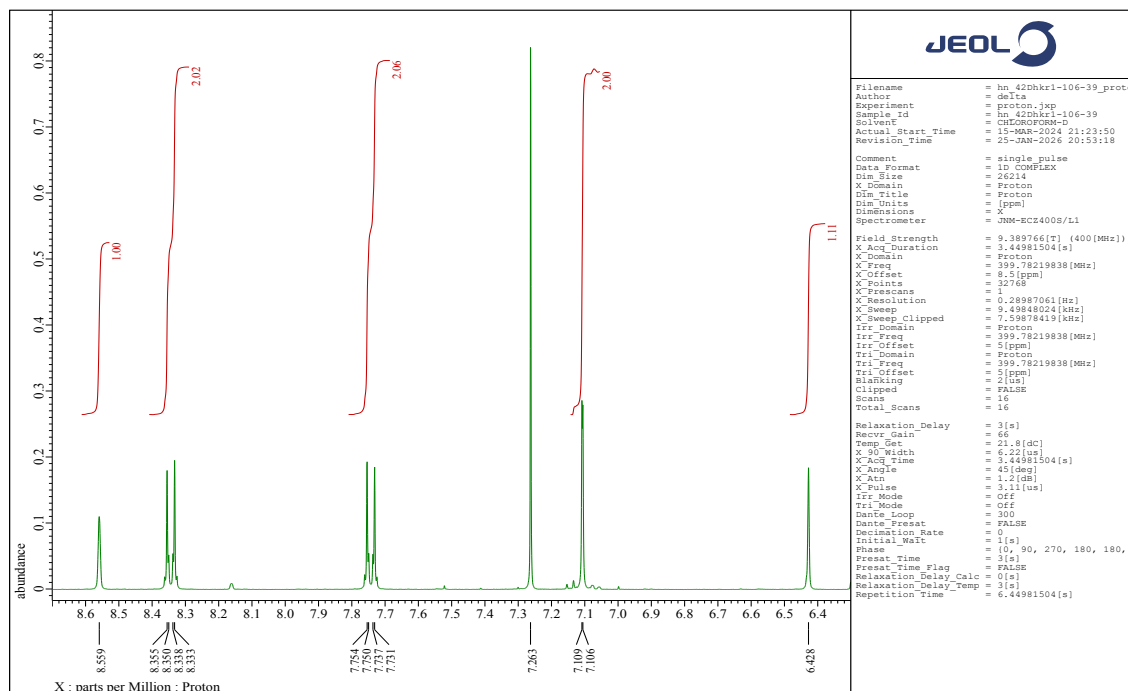


Figure S13. ^1H NMR (400 MHz, CDCl_3 , ppm) of **8**



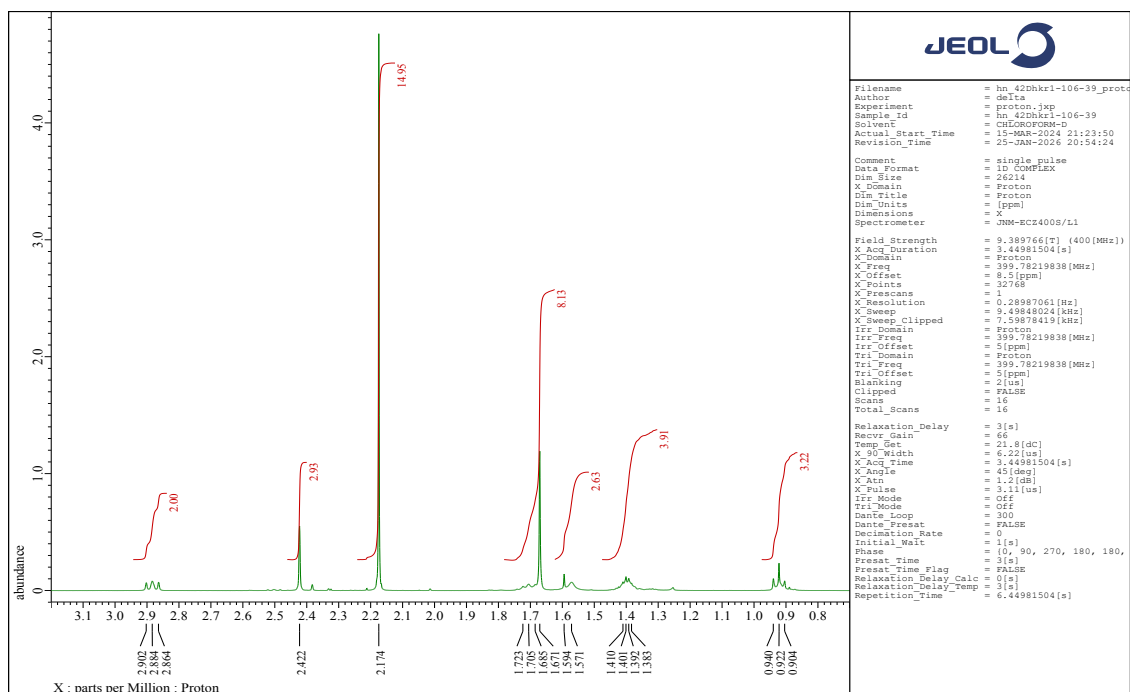
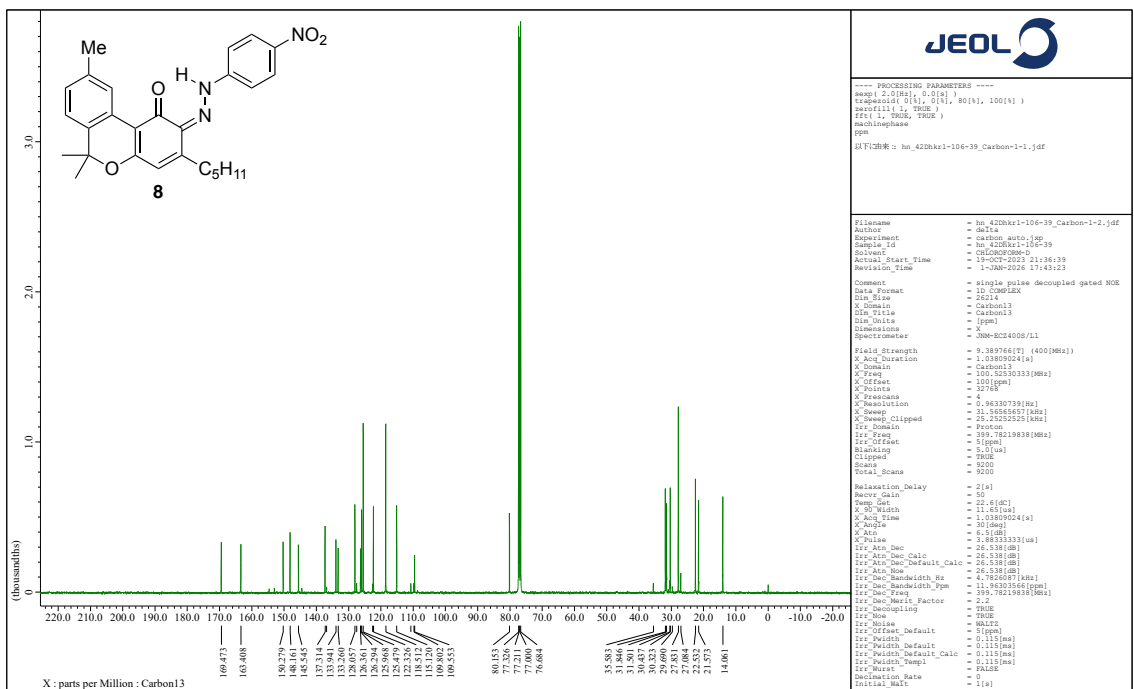


Figure S14. ^{13}C NMR (100 MHz, CDCl_3 , ppm) of **8**



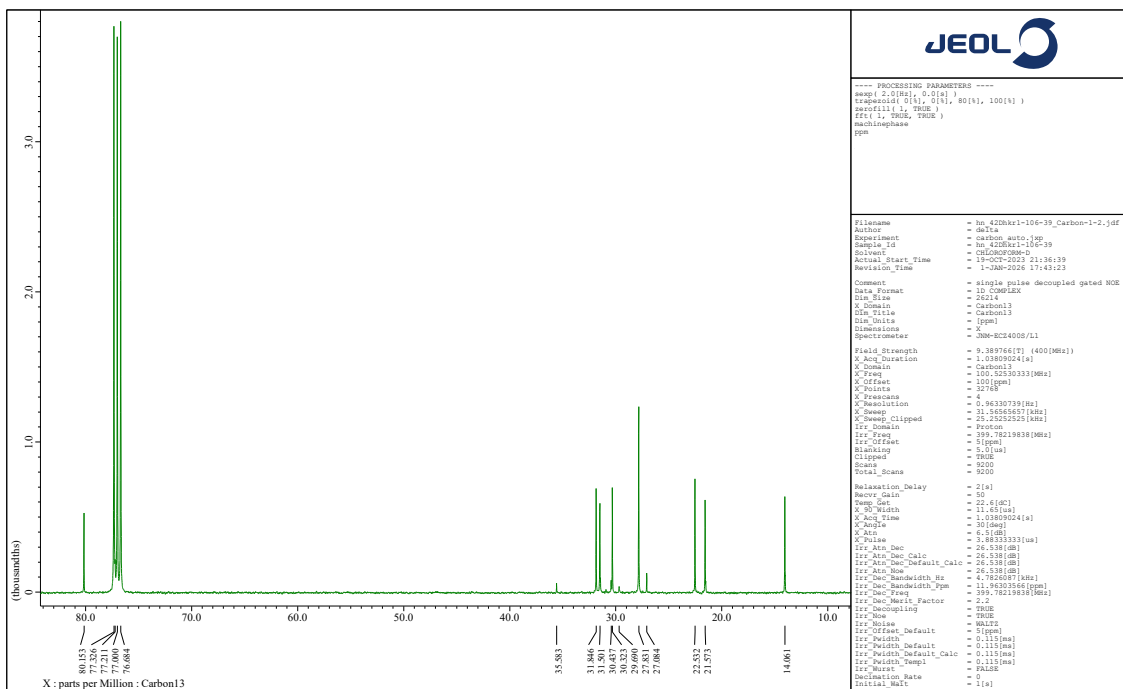
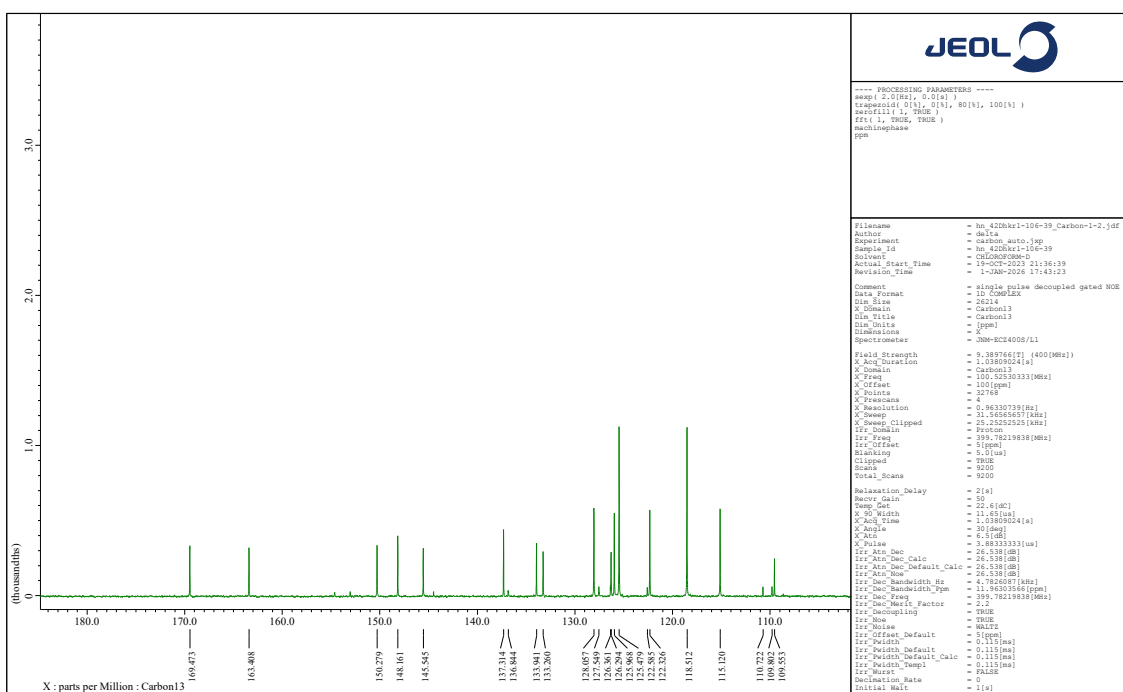


Figure S15. COSY spectrum of 8

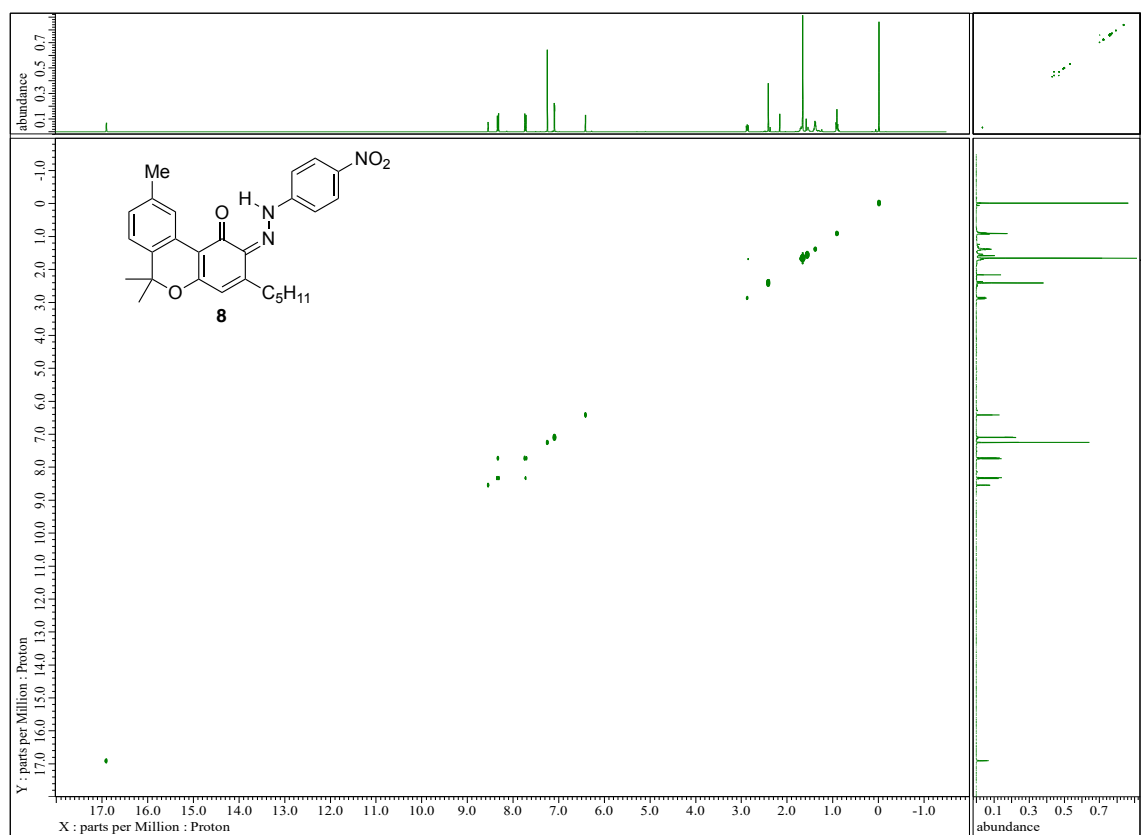


Figure S16. HSQC spectrum of 8

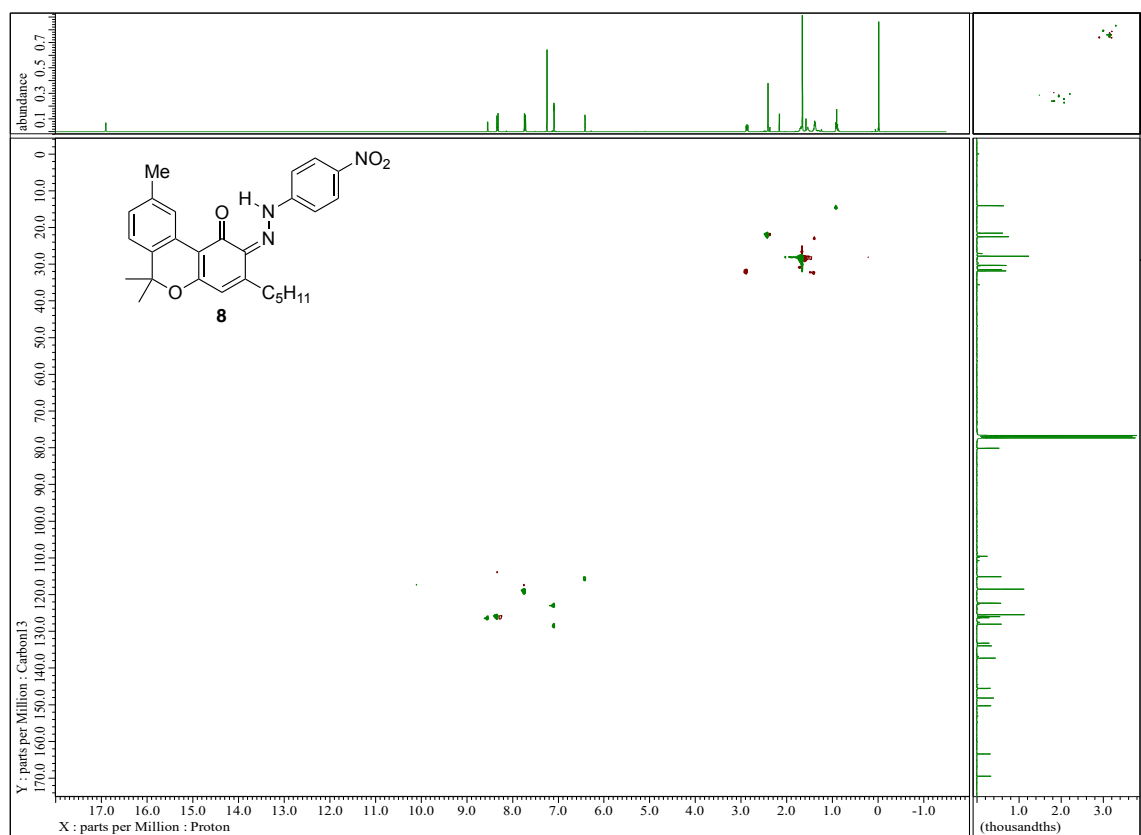
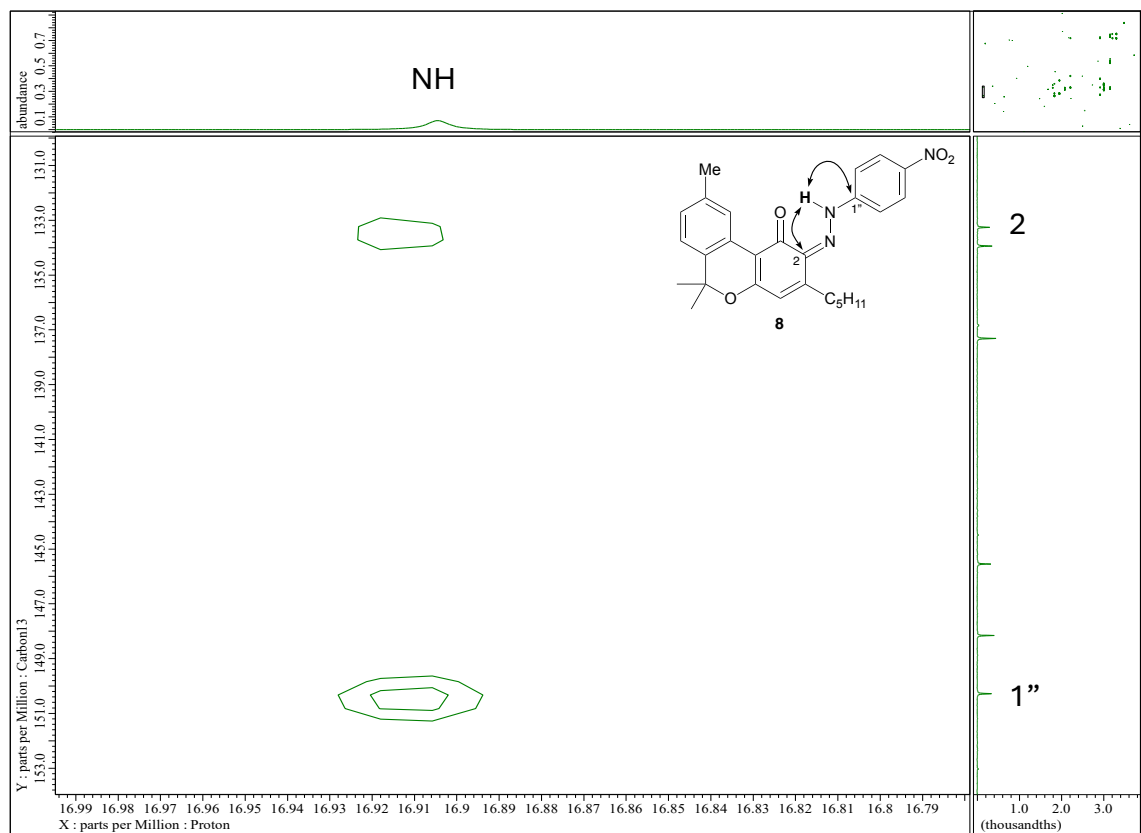
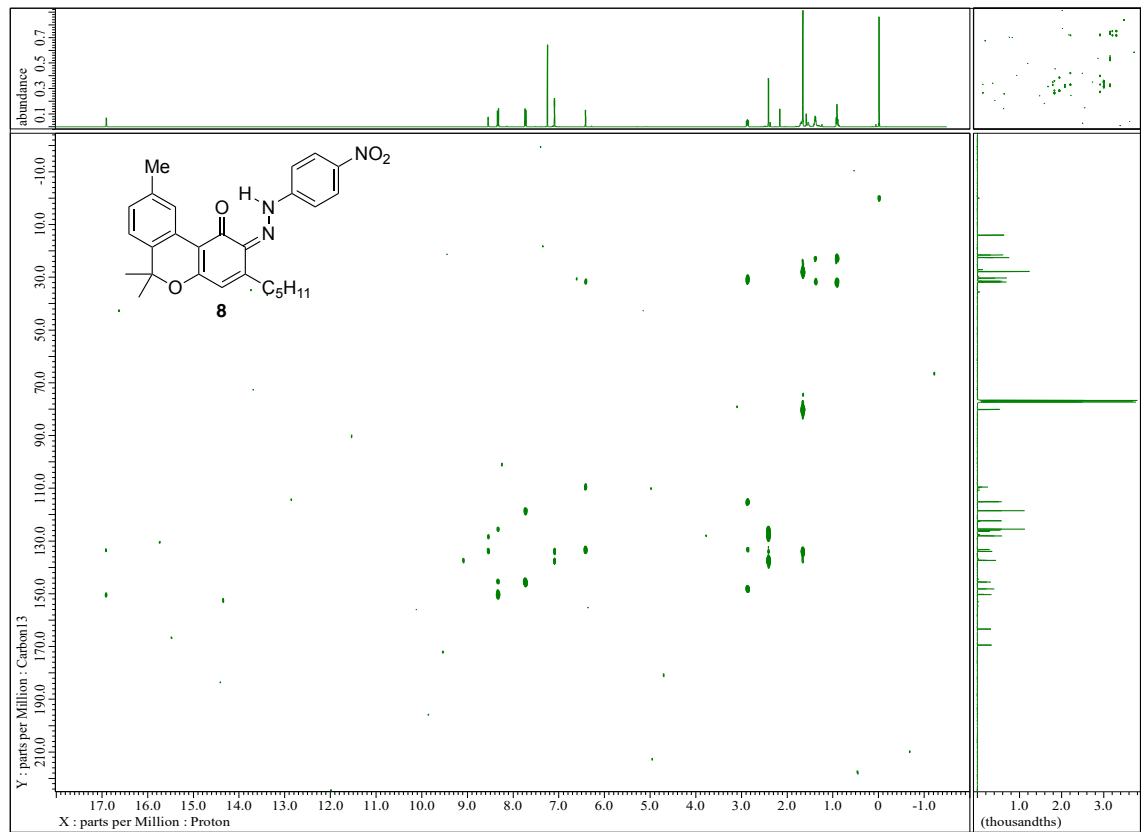


Figure S17. HMBC spectrum of 8



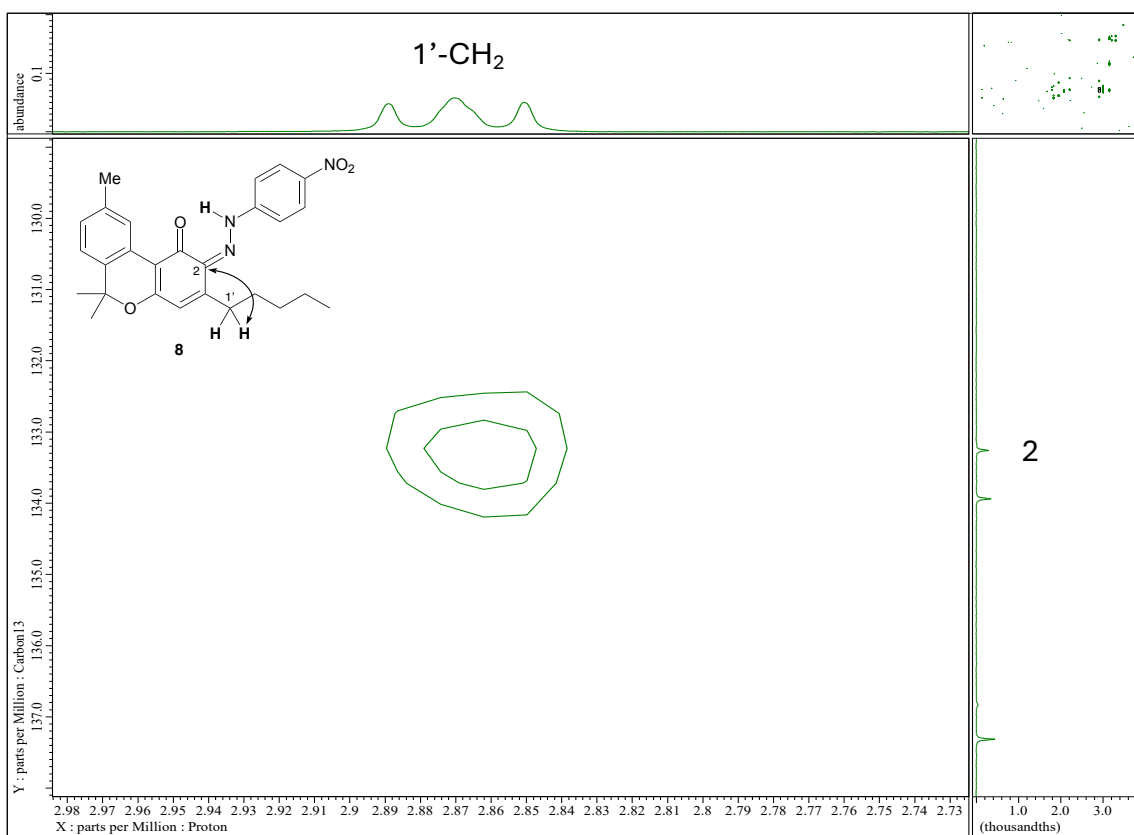


Figure S18. NOESY spectrum of **8**

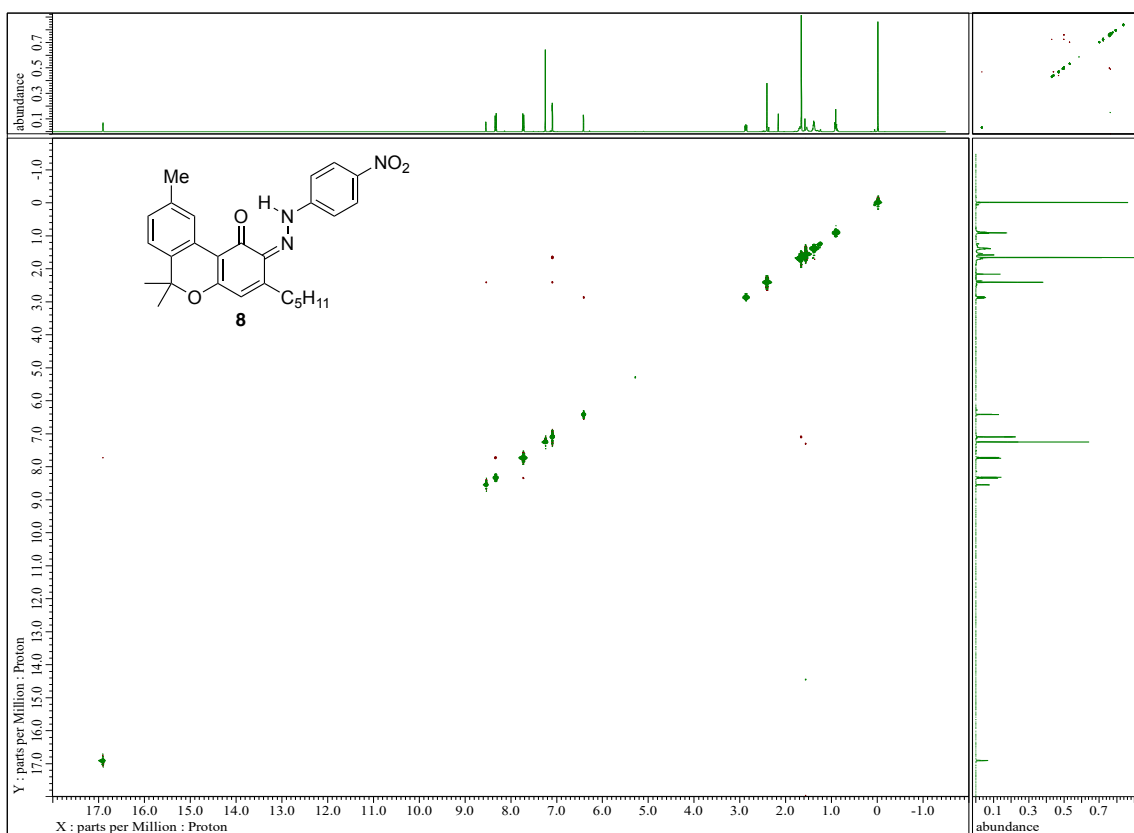
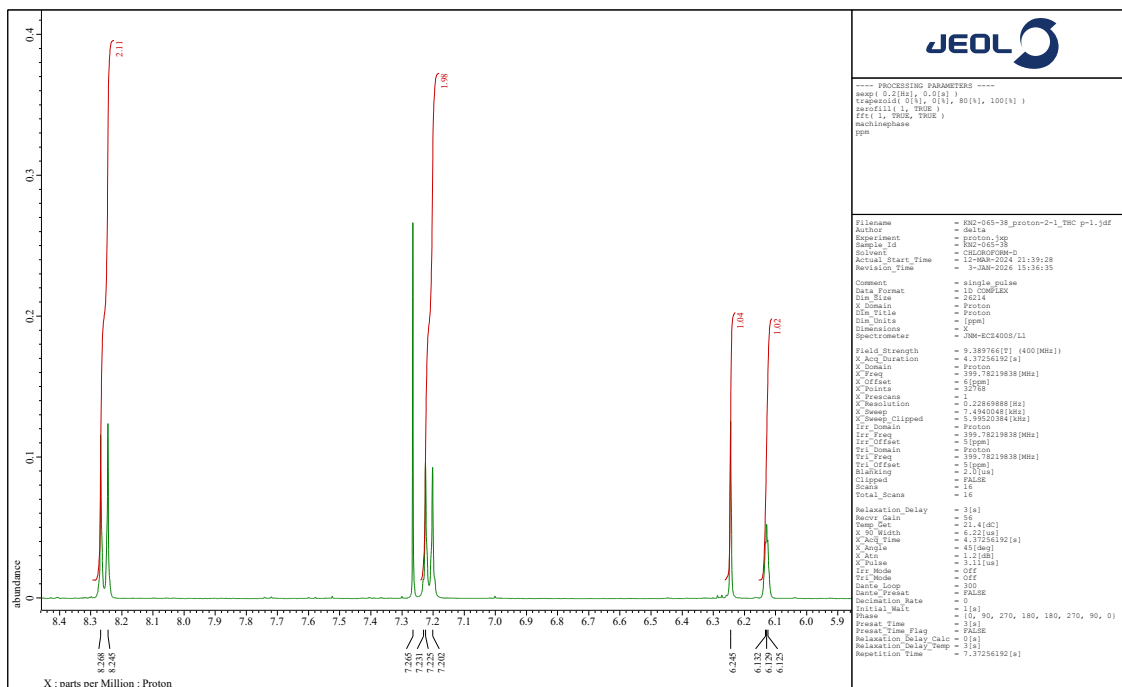


Figure S19. ^1H NMR (400 MHz, CDCl_3 , ppm) of **9**



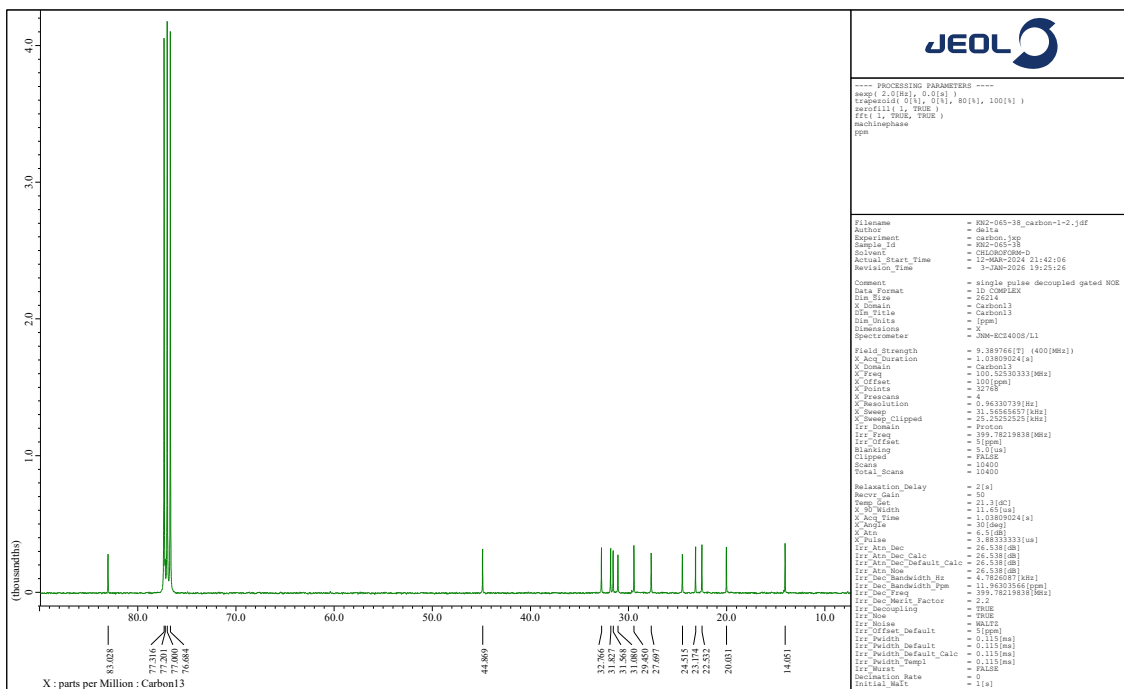
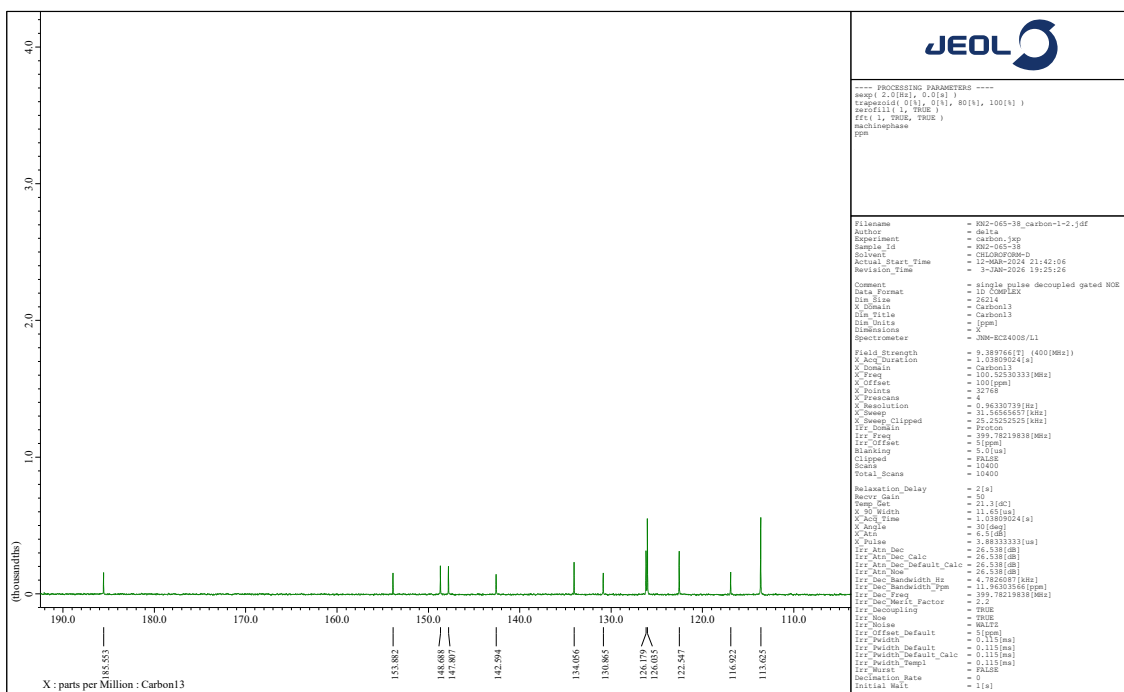


Figure S21. COSY spectrum of 9

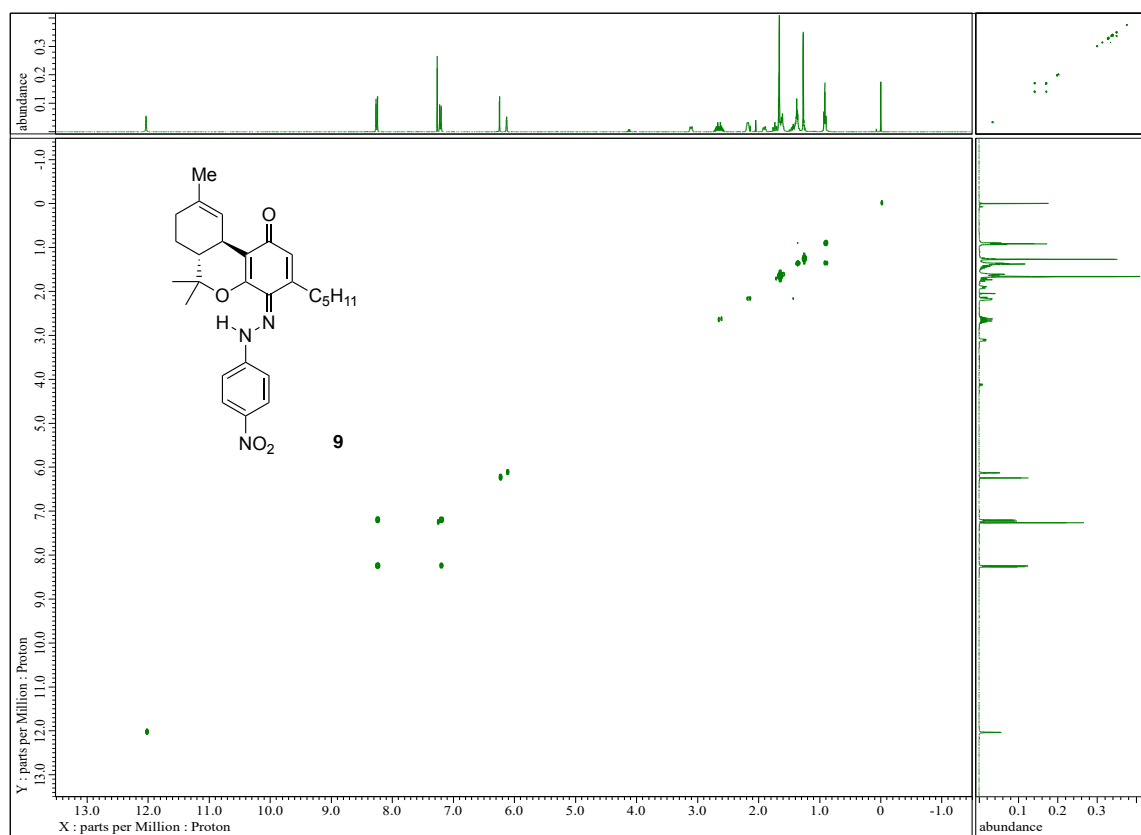


Figure S22. HSQC spectrum of 9

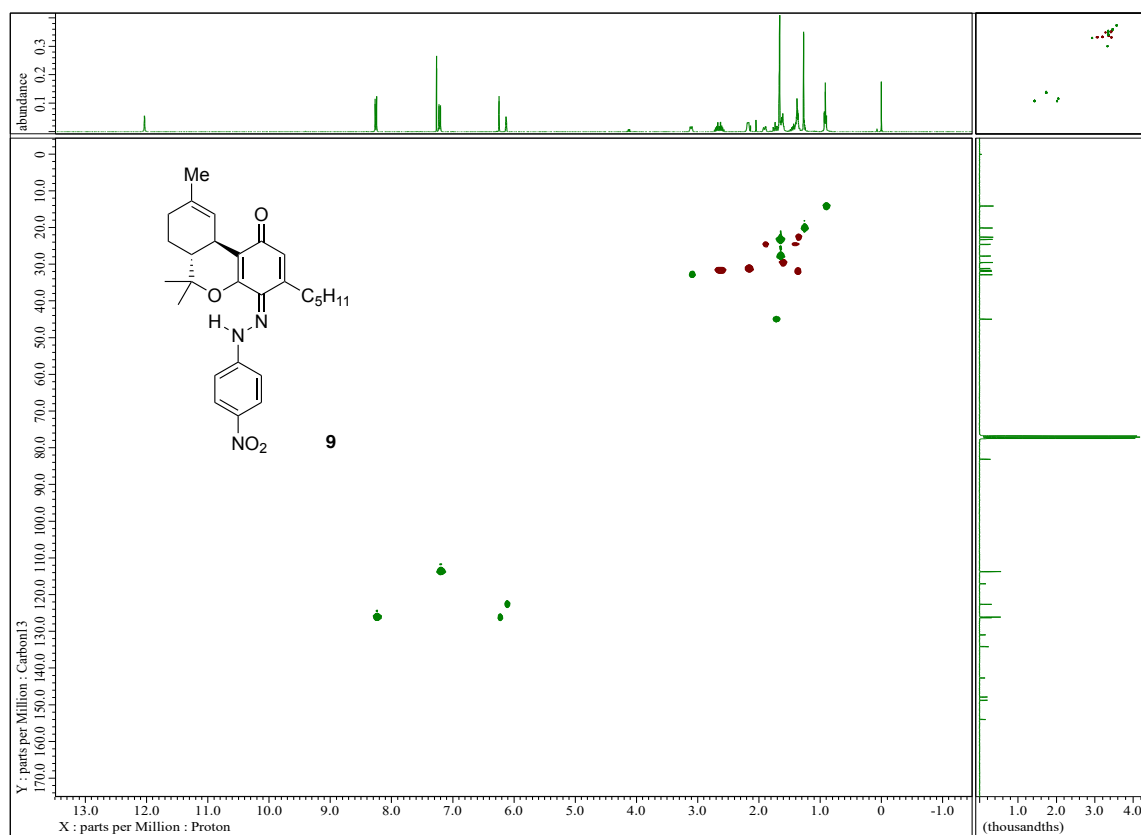


Figure S23. HMBC spectrum of 9

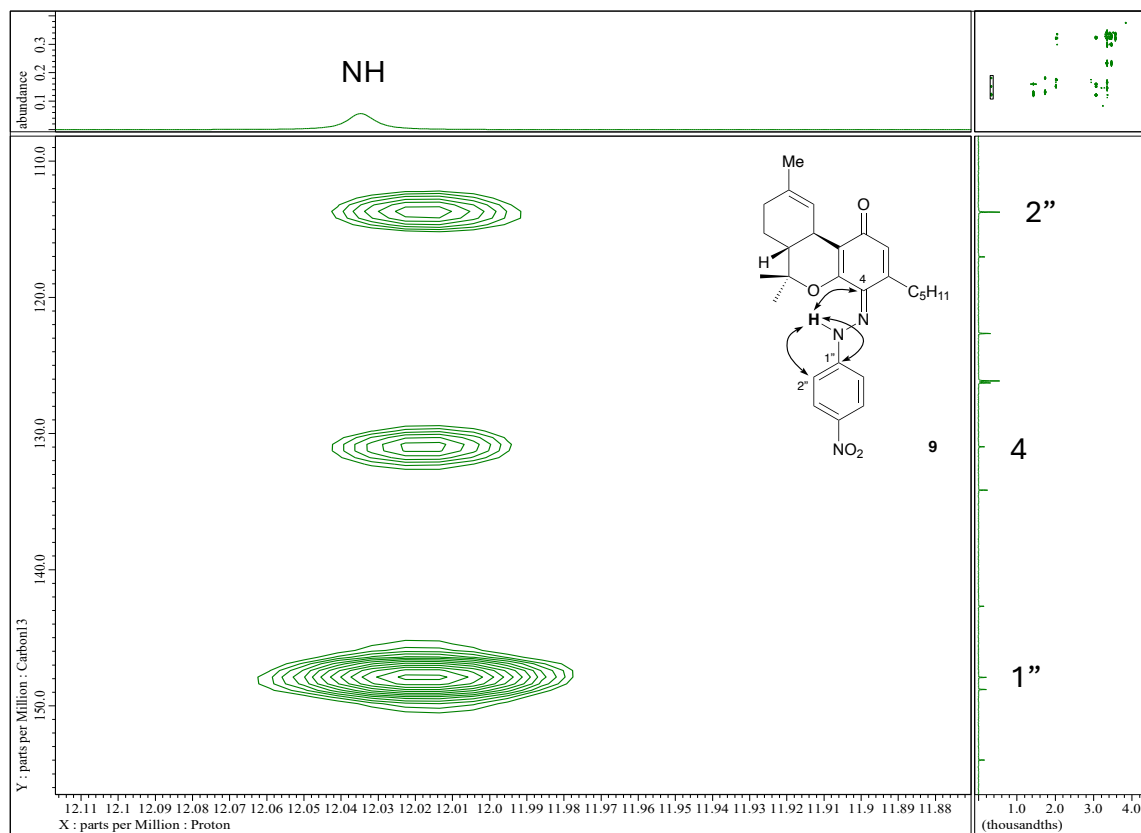
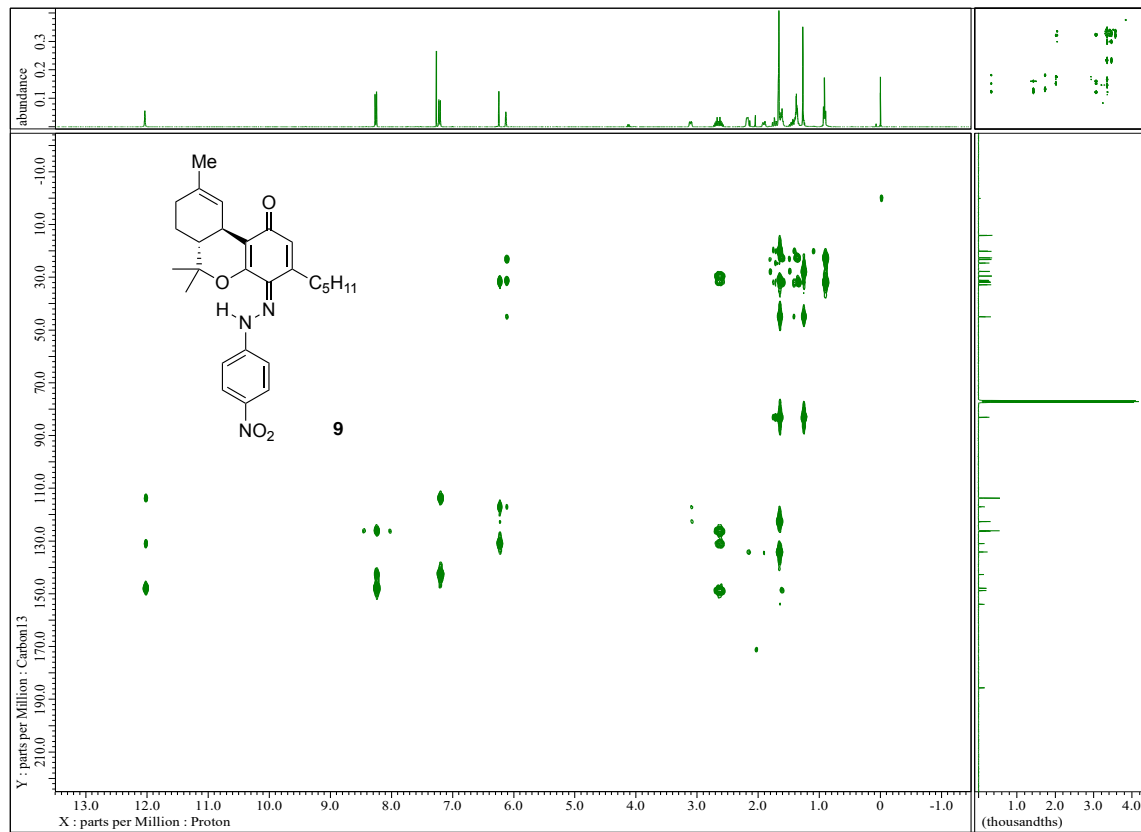


Figure S24. NOESY spectrum of **9**

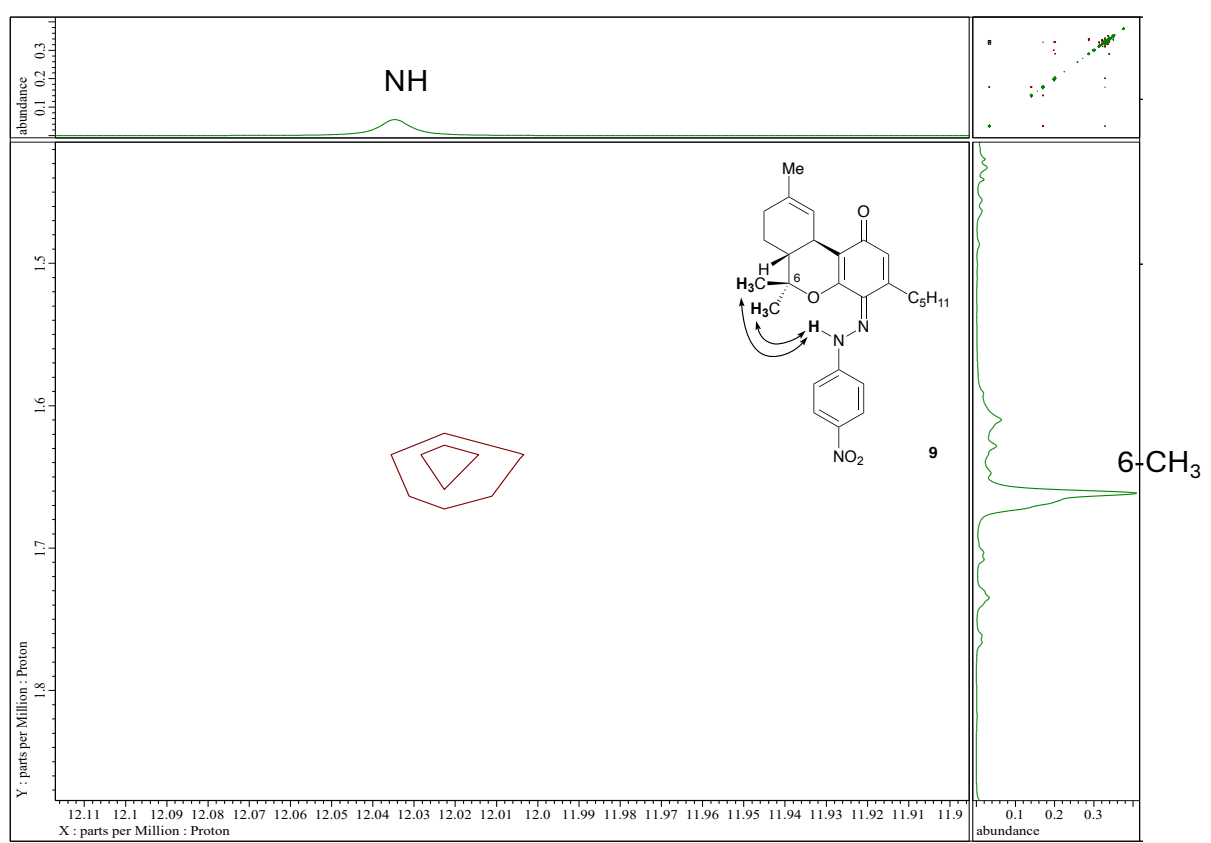
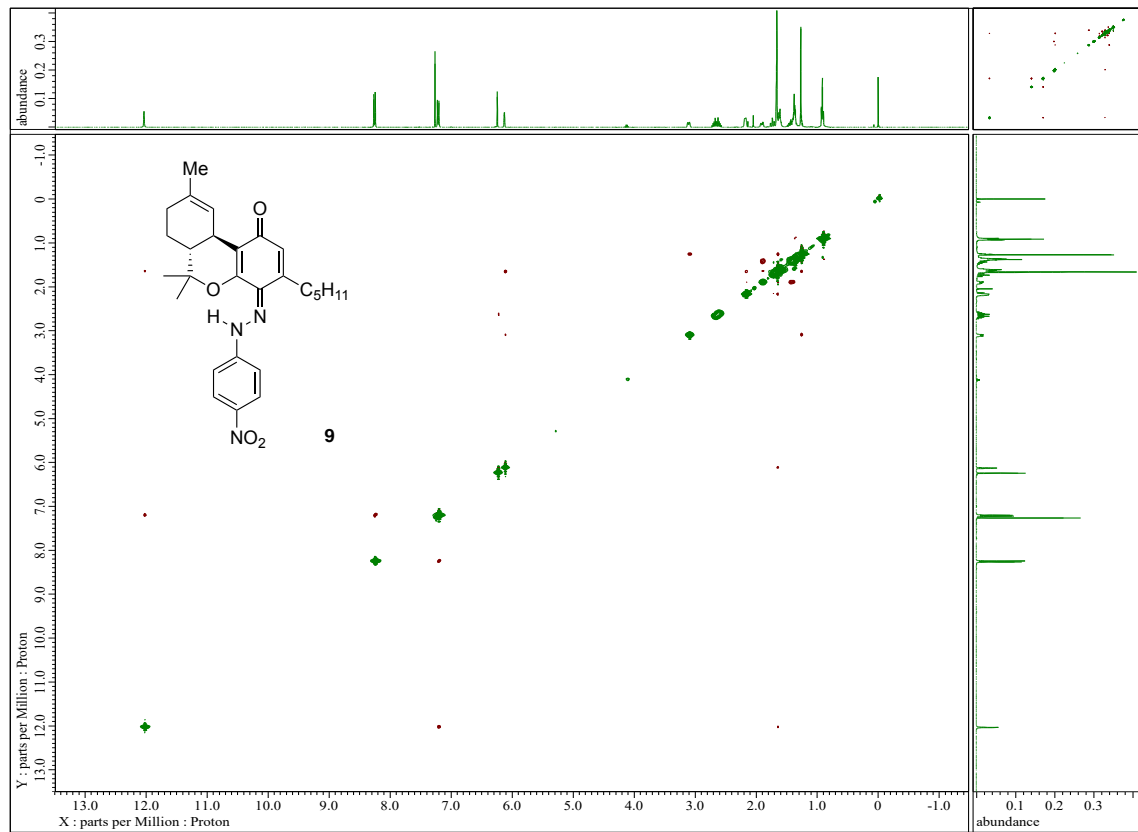
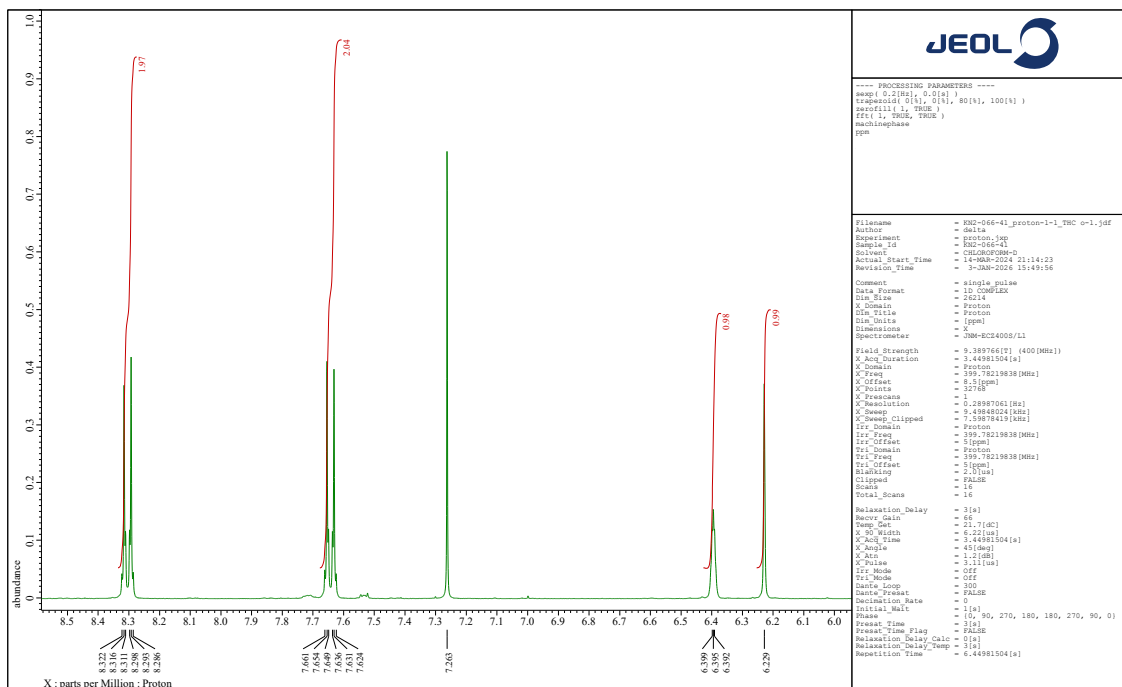
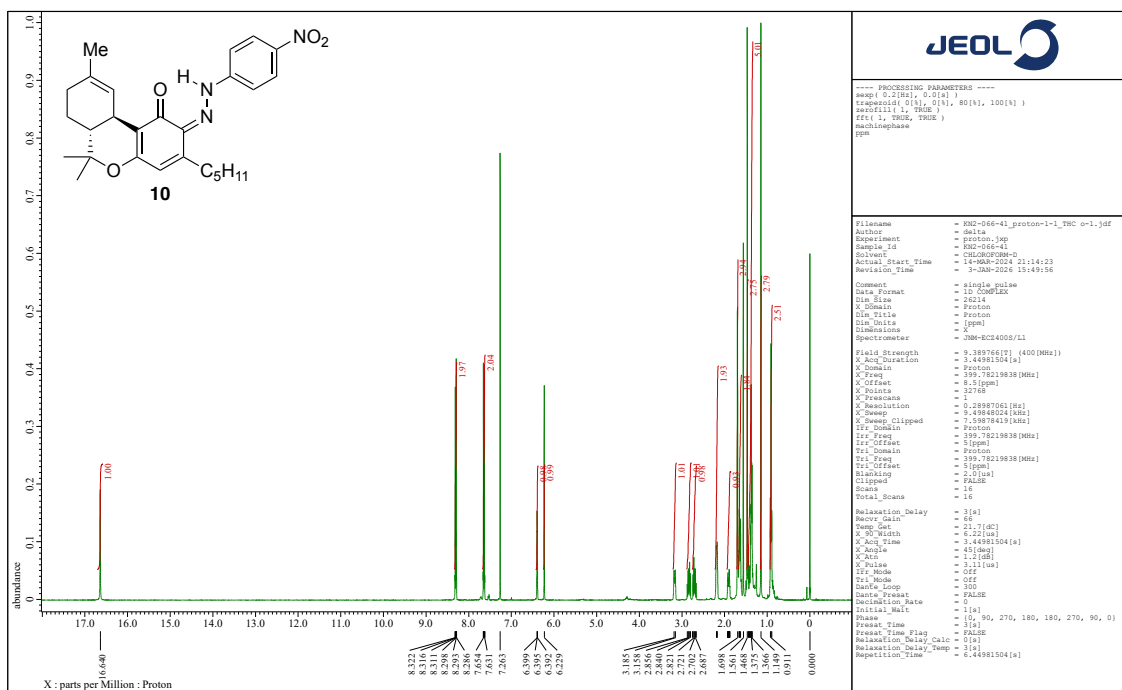


Figure S25. ^1H NMR (400 MHz, CDCl_3 , ppm) of **10**



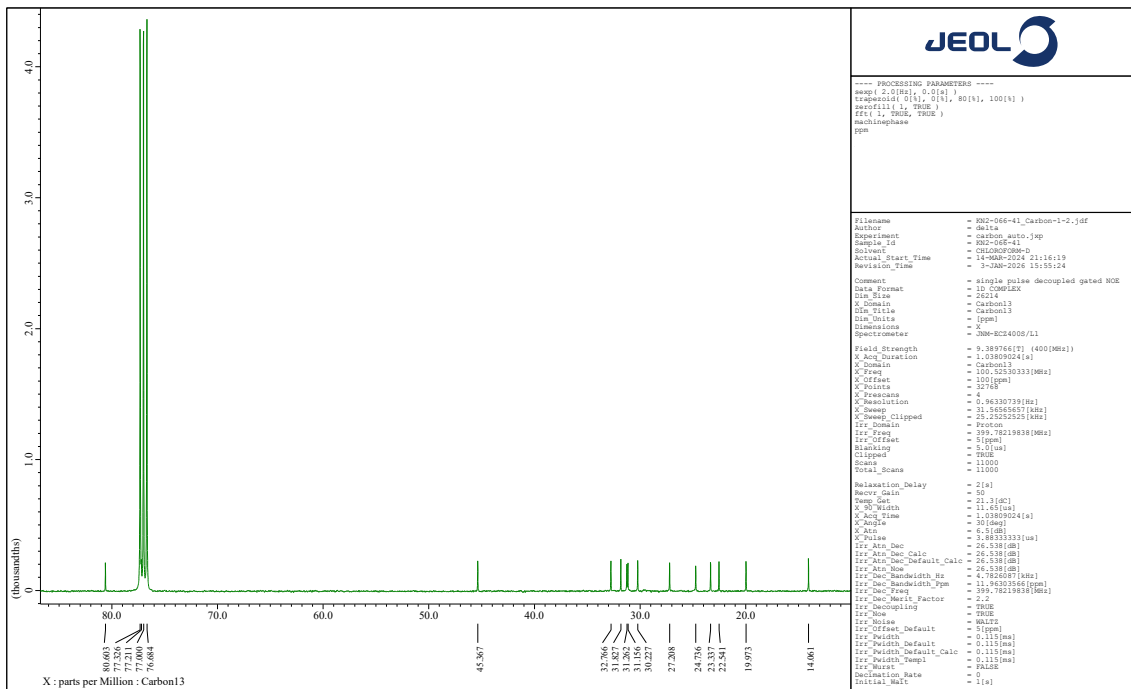
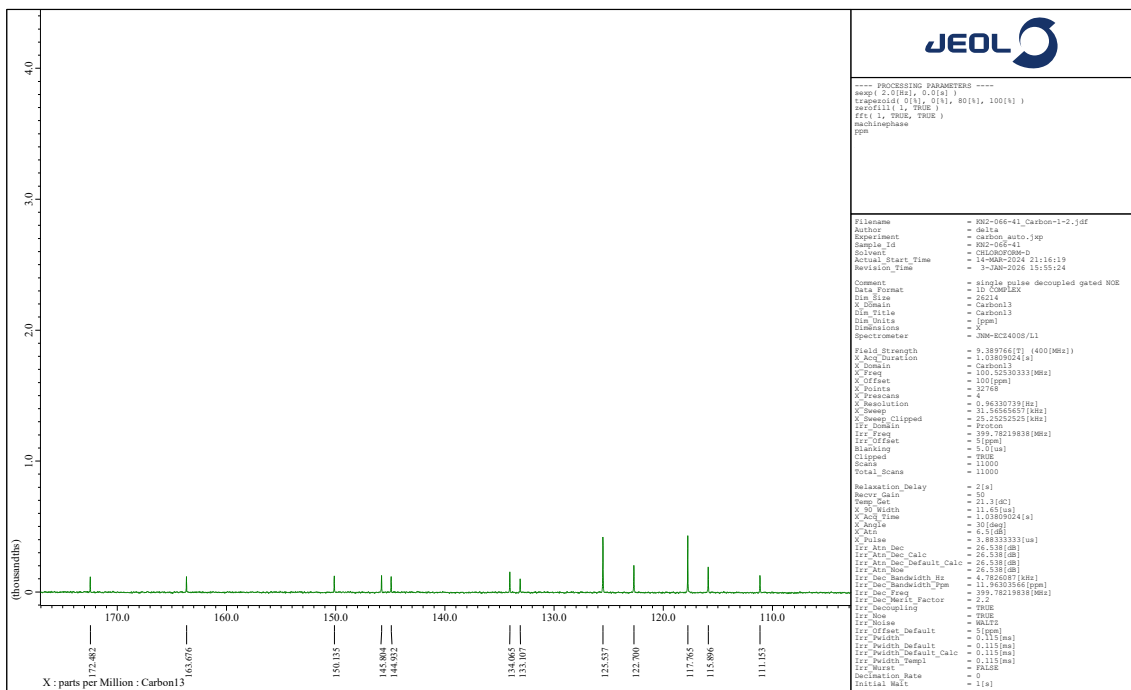


Figure S27. COSY spectrum of 10

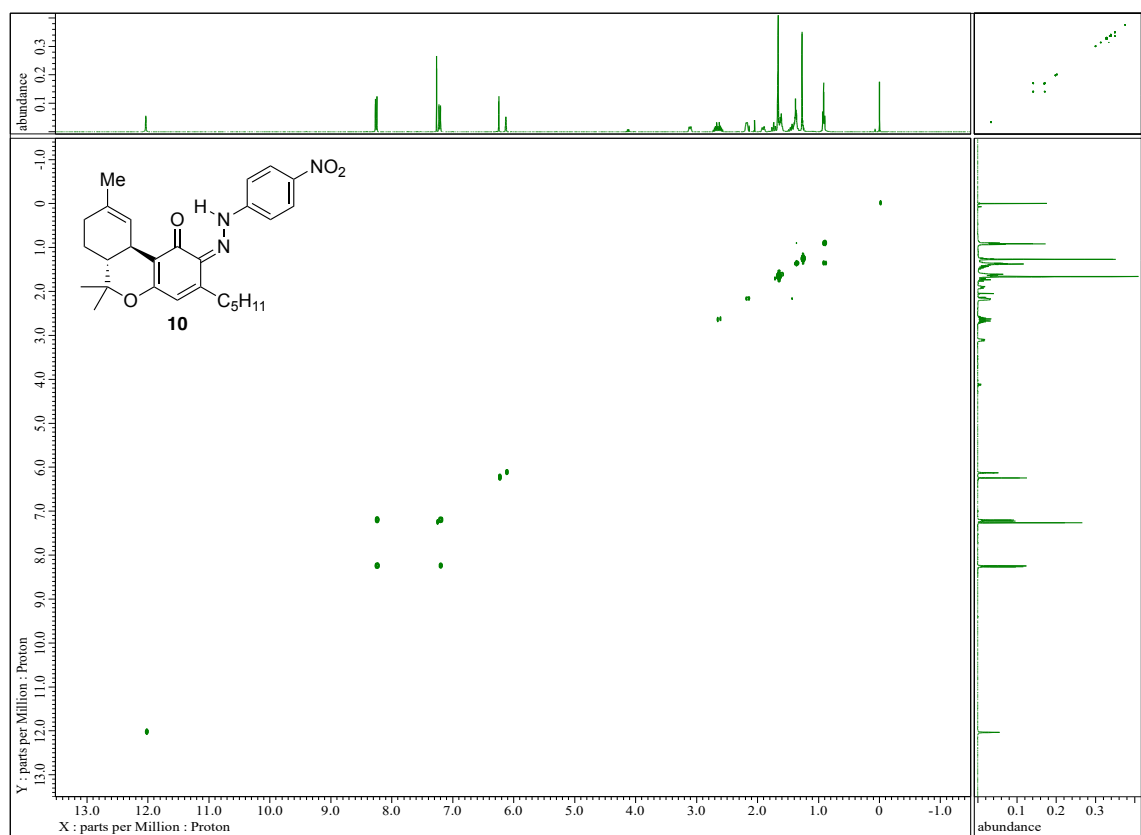


Figure S28. HSQC spectrum of 10

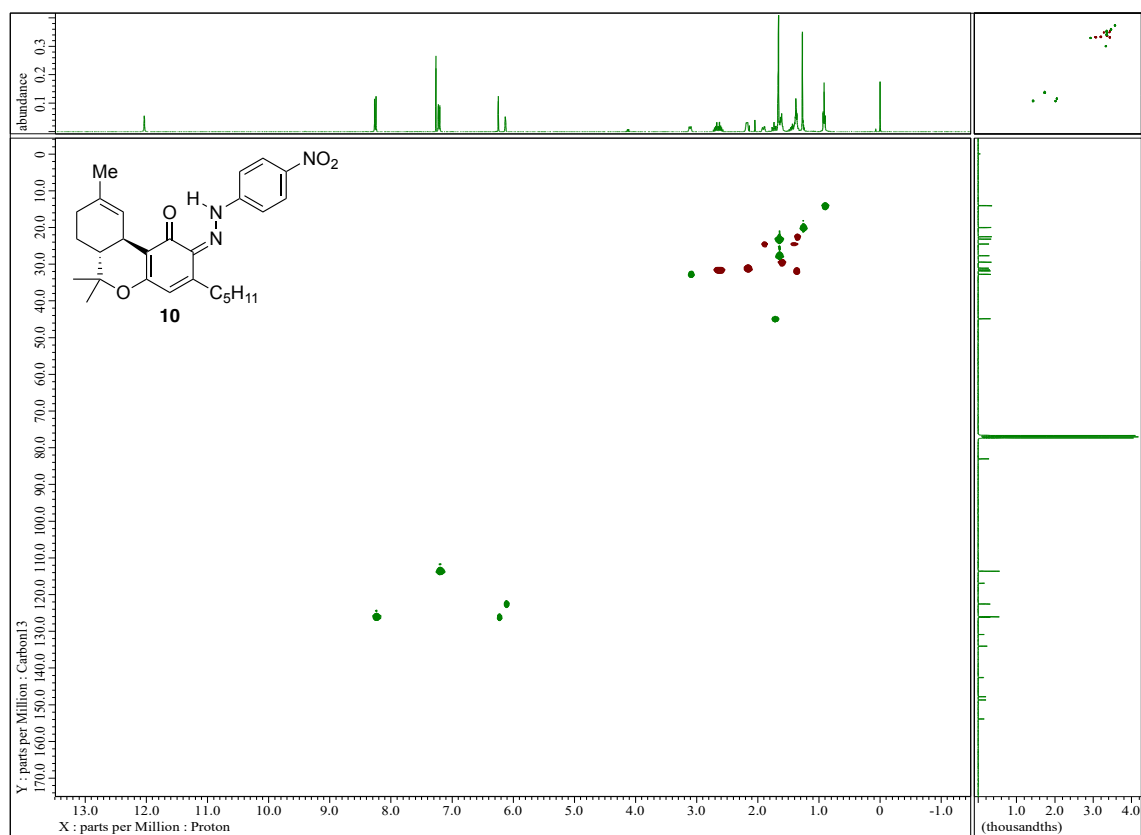
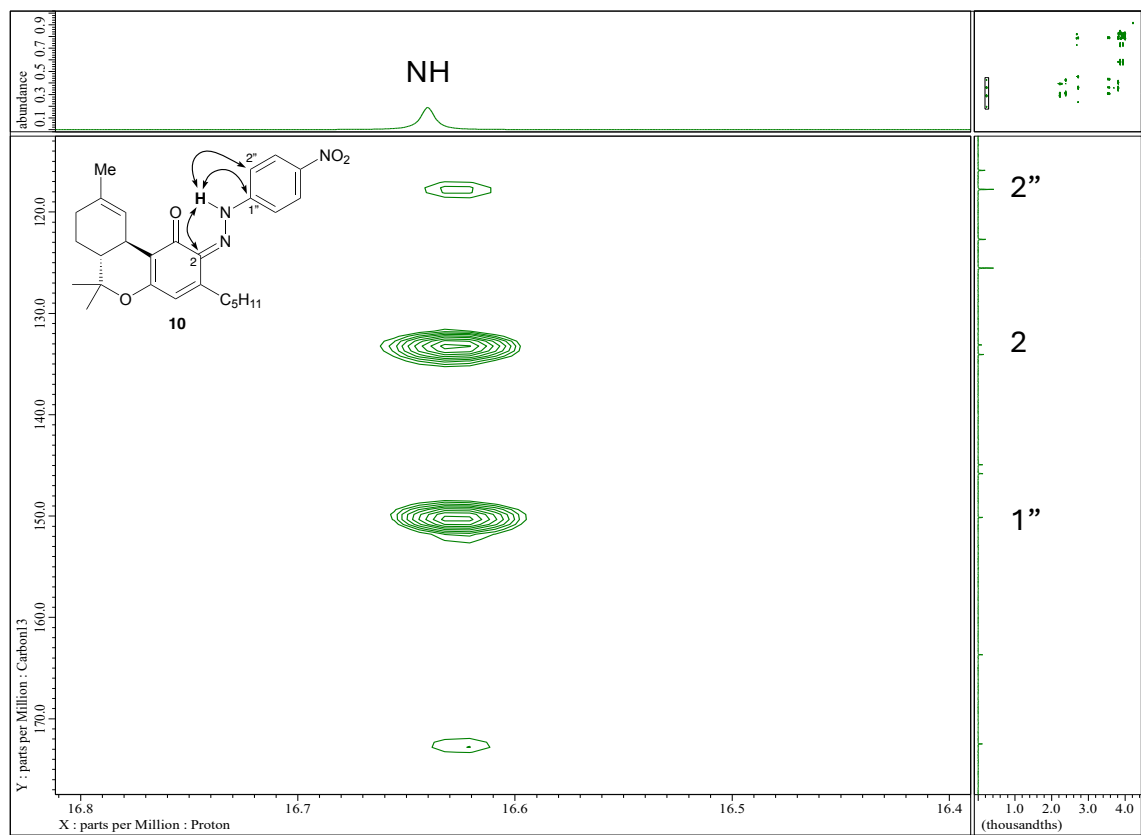
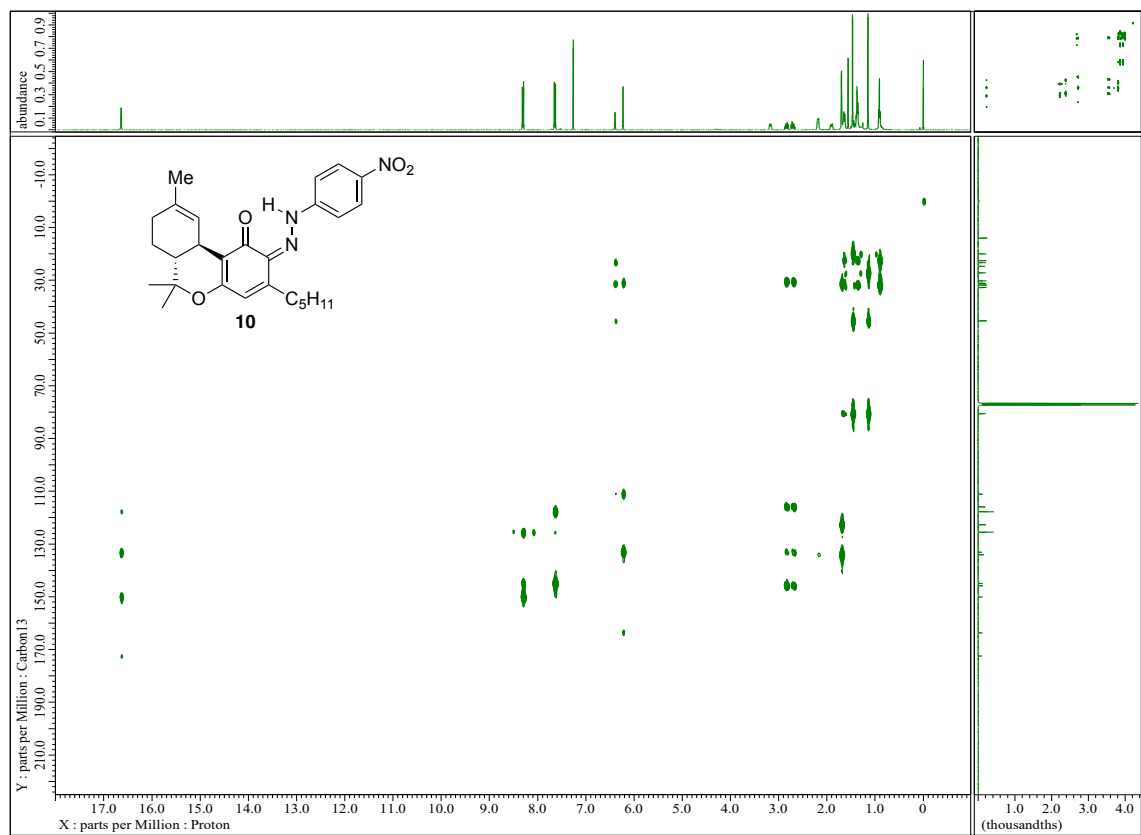


Figure S29. HMBC spectrum of 10



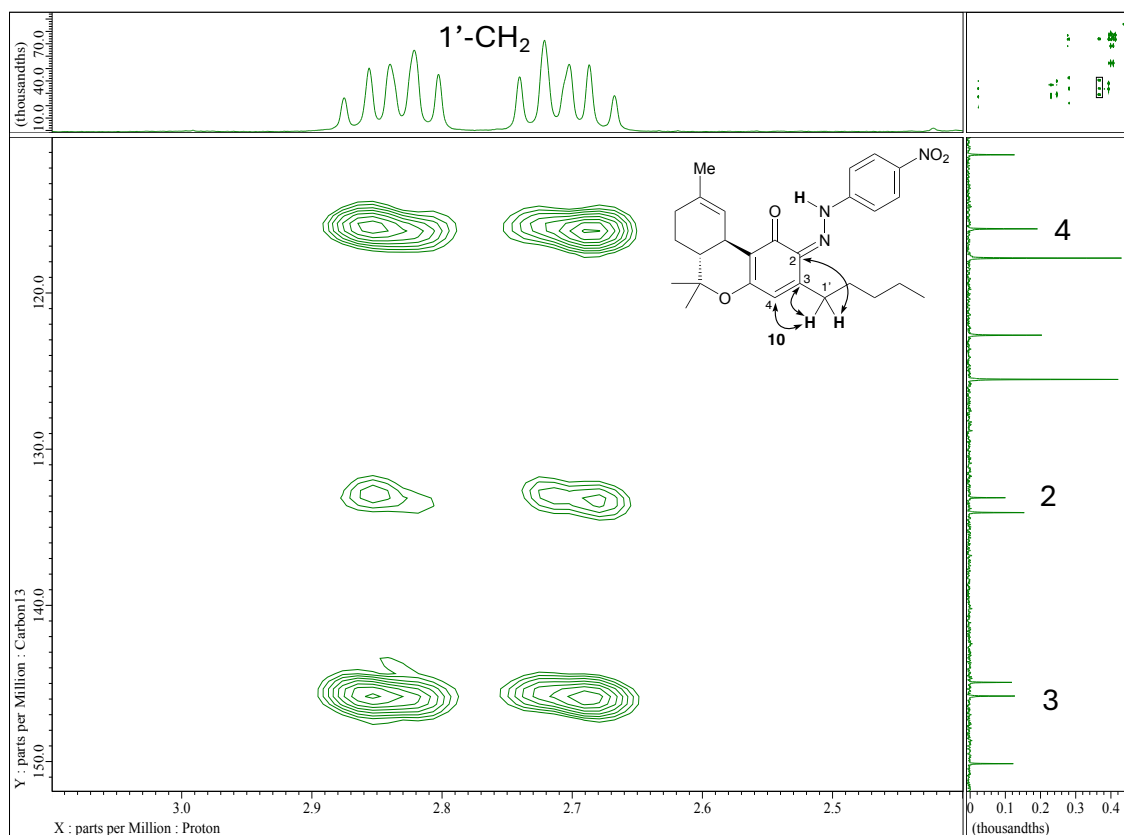


Figure S30. NOESY spectrum of **10**

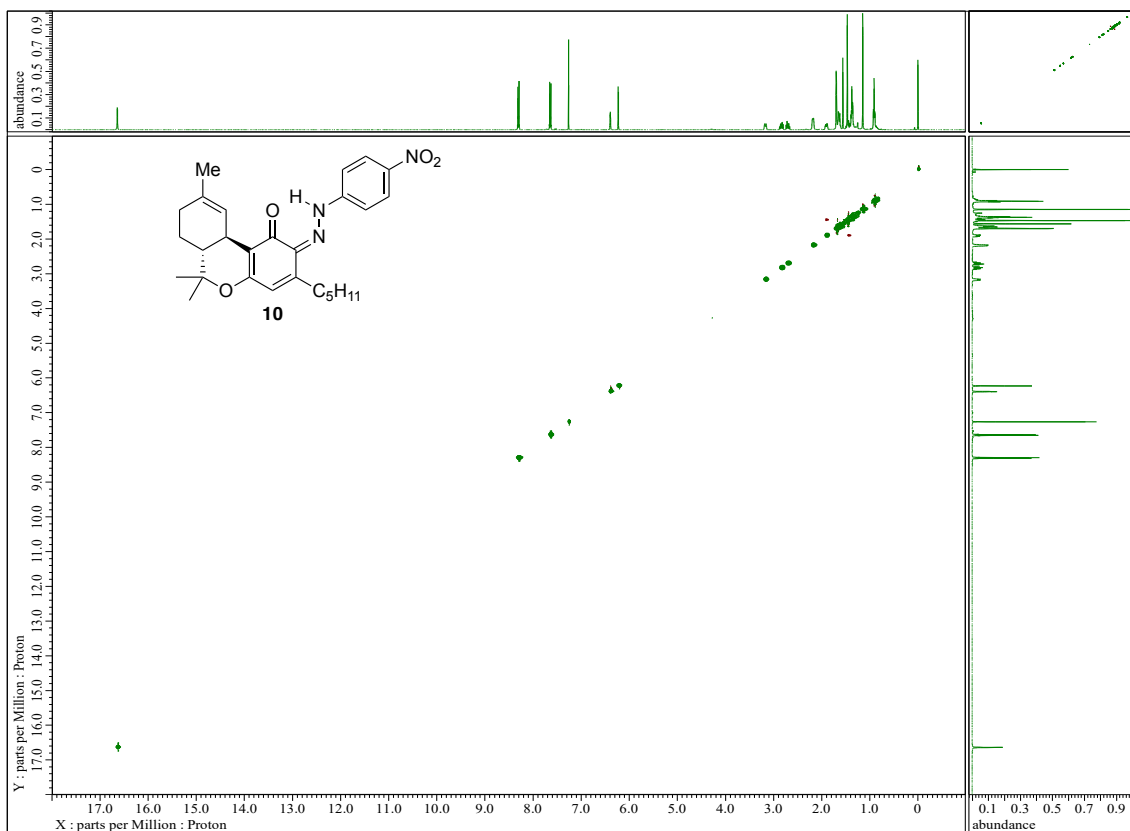
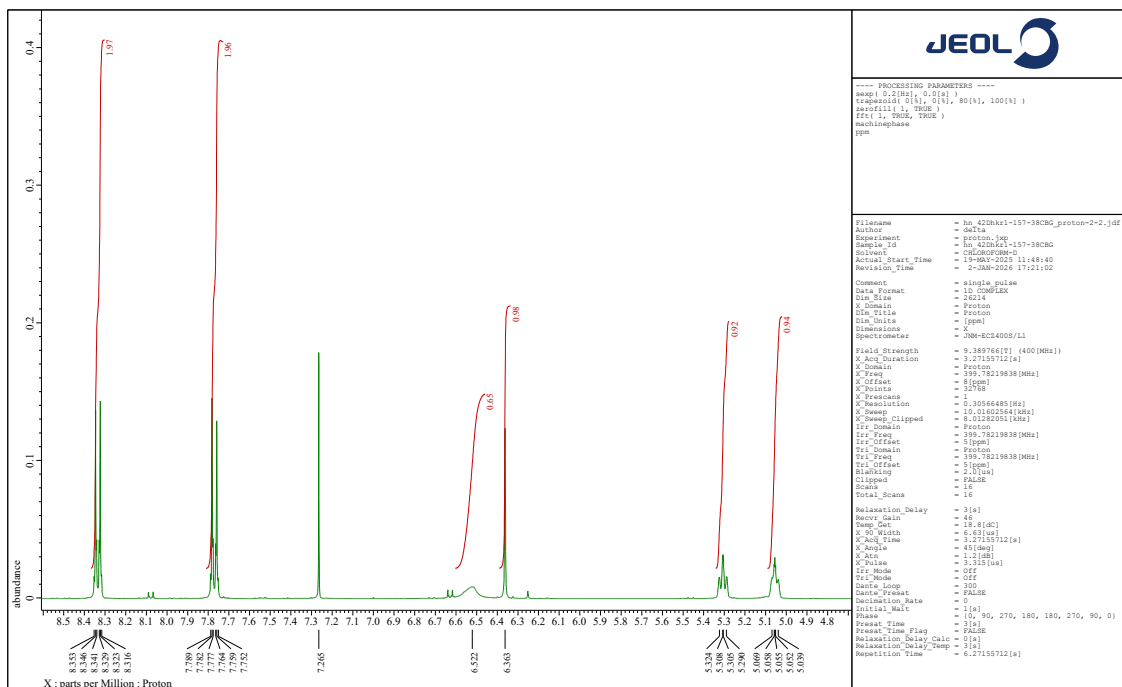
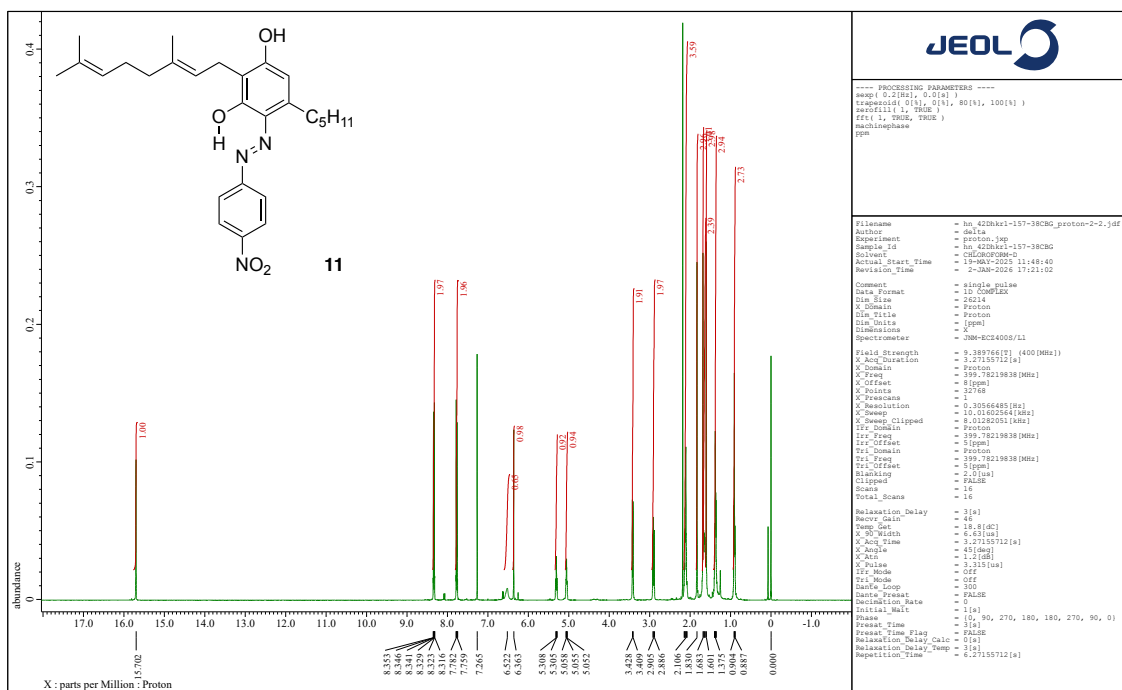


Figure S31. ^1H NMR (400 MHz, CDCl_3 , ppm) of **11**



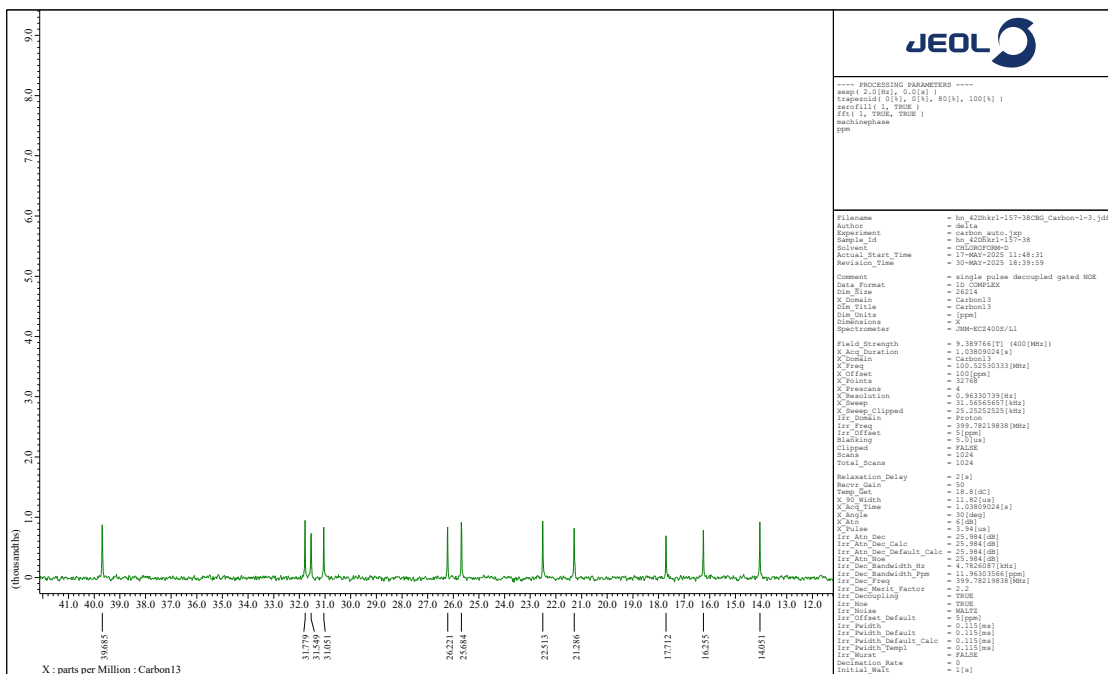
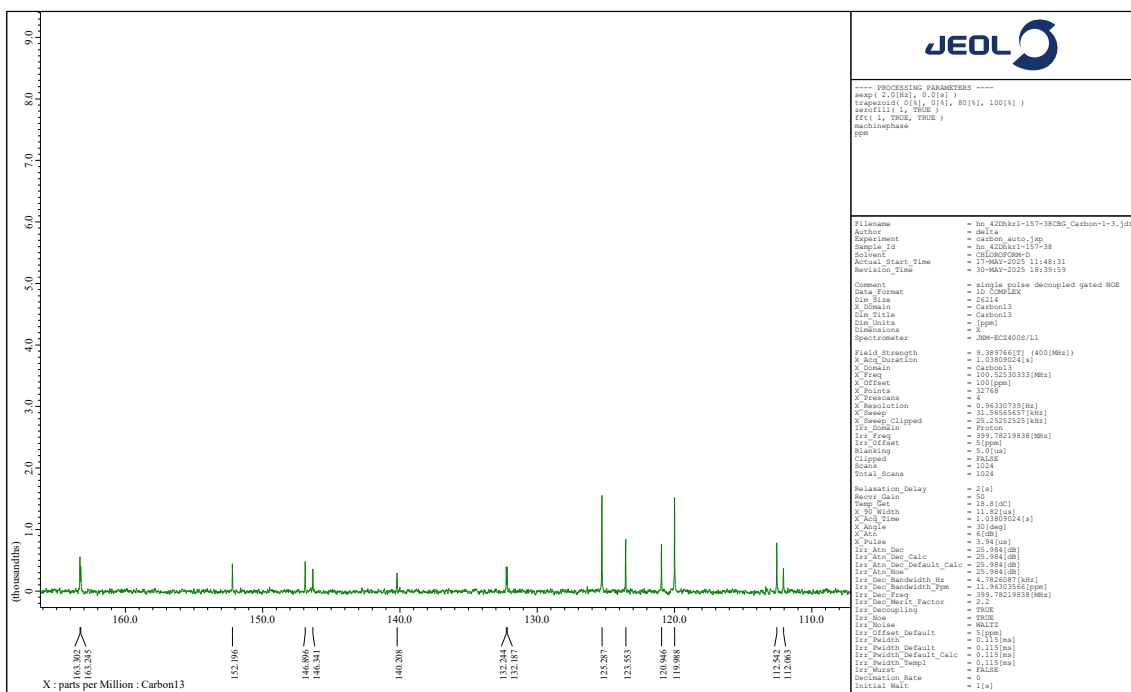


Figure S33. COSY spectrum of 11

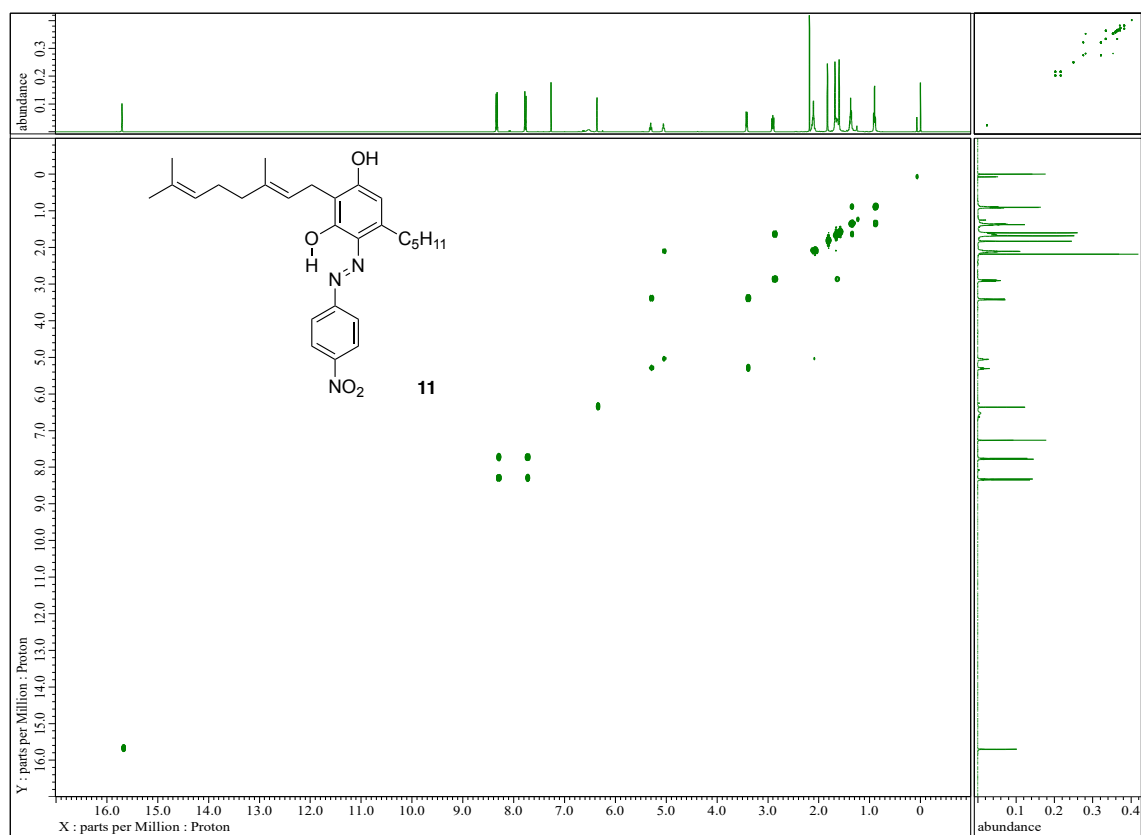


Figure S34. HSQC spectrum of 11

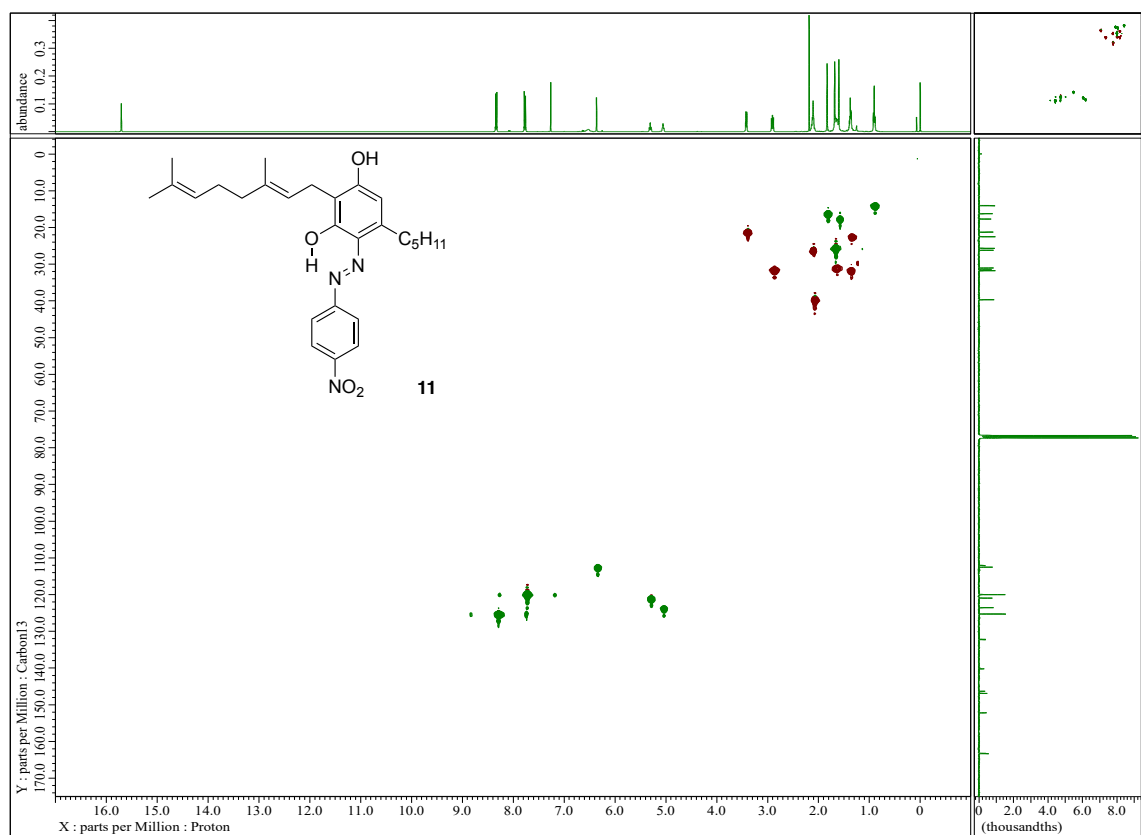


Figure S35. HMBC spectrum of **11**

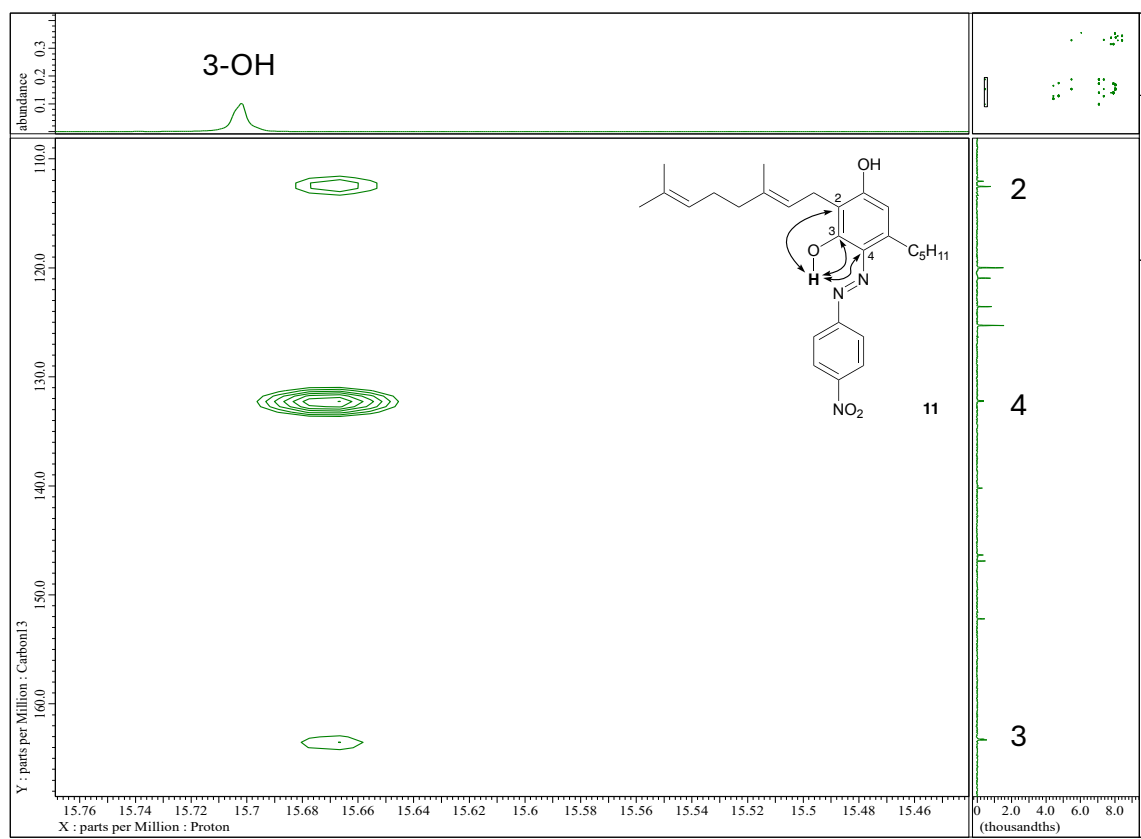
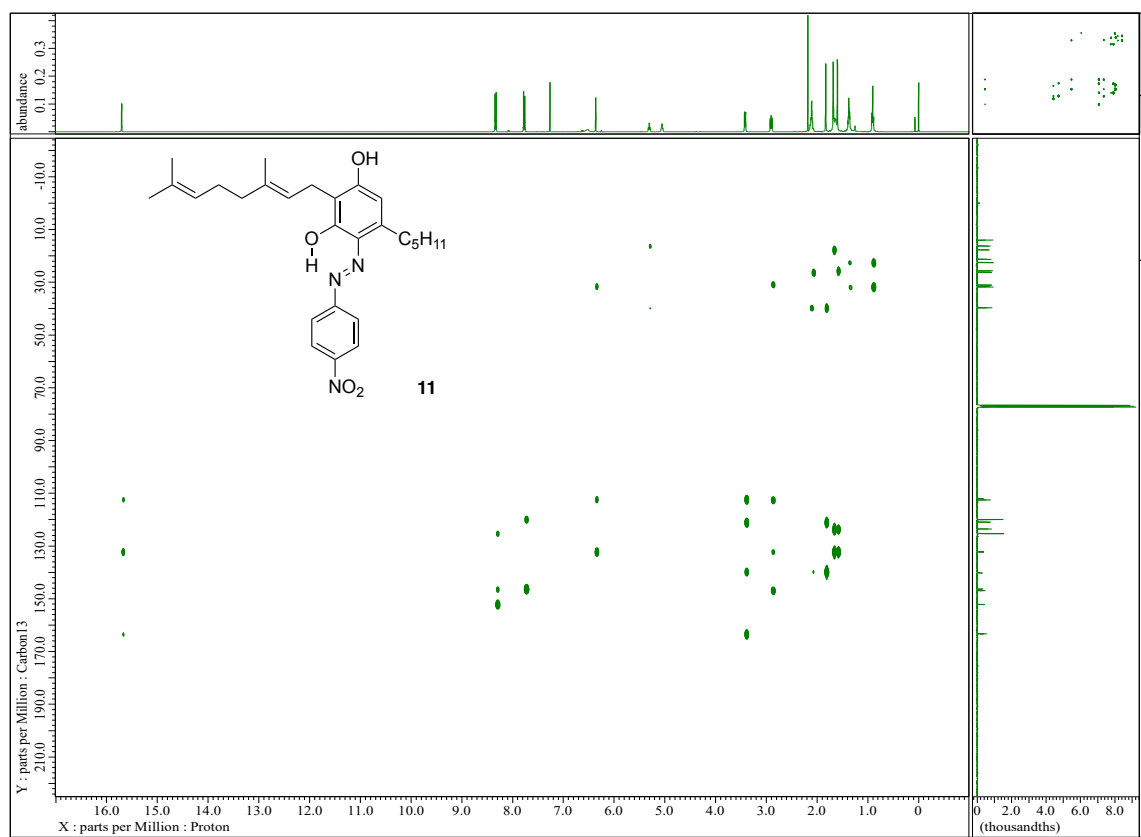


Figure S36. NOESY spectrum of **11**

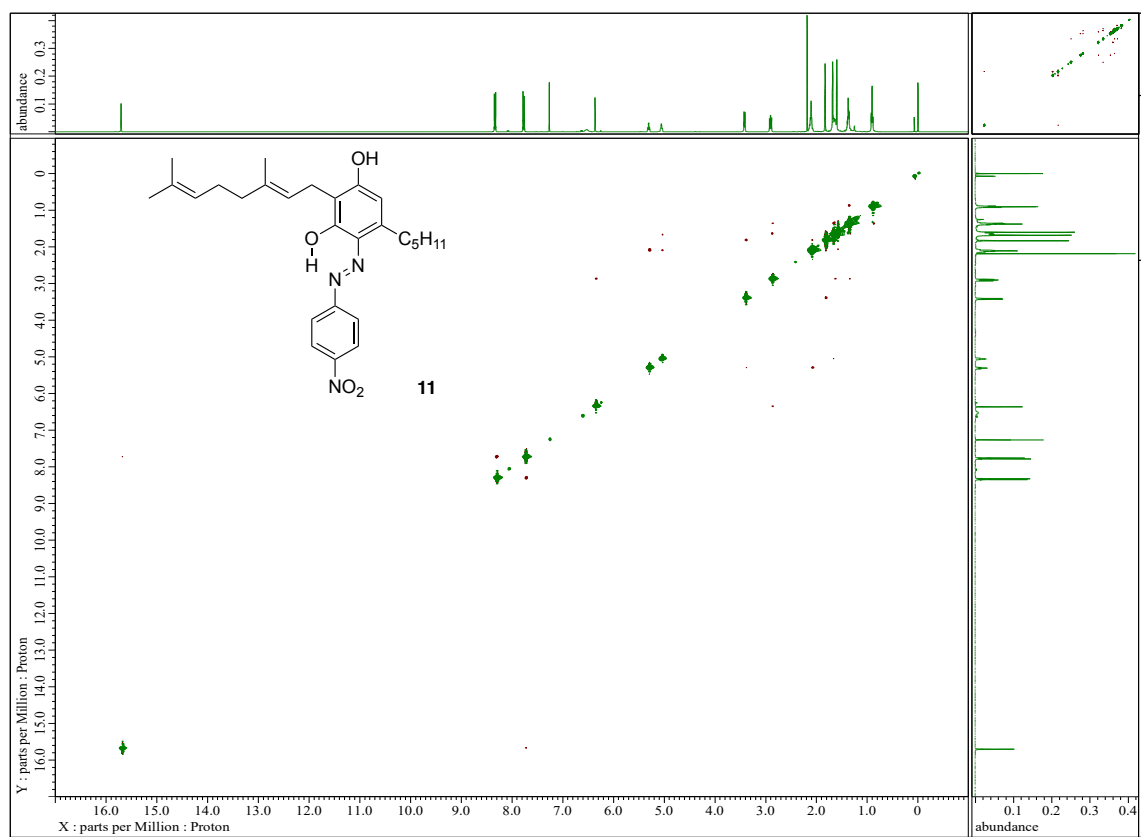
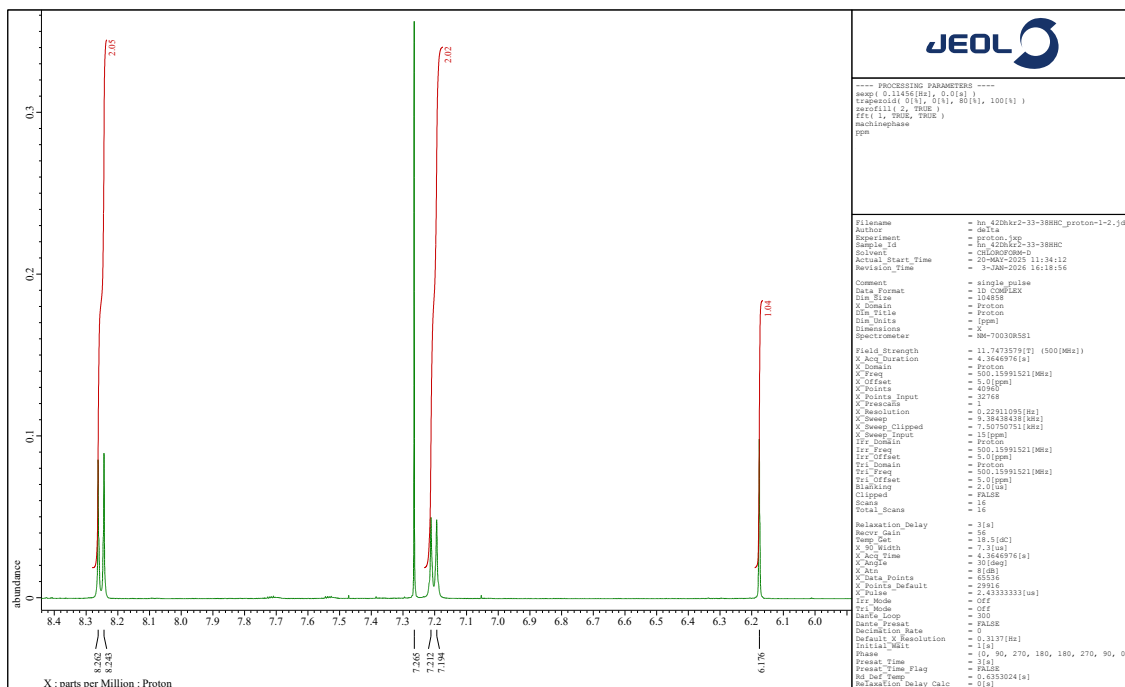


Figure S37. ^1H NMR (500 MHz, CDCl_3 , ppm) of **12**



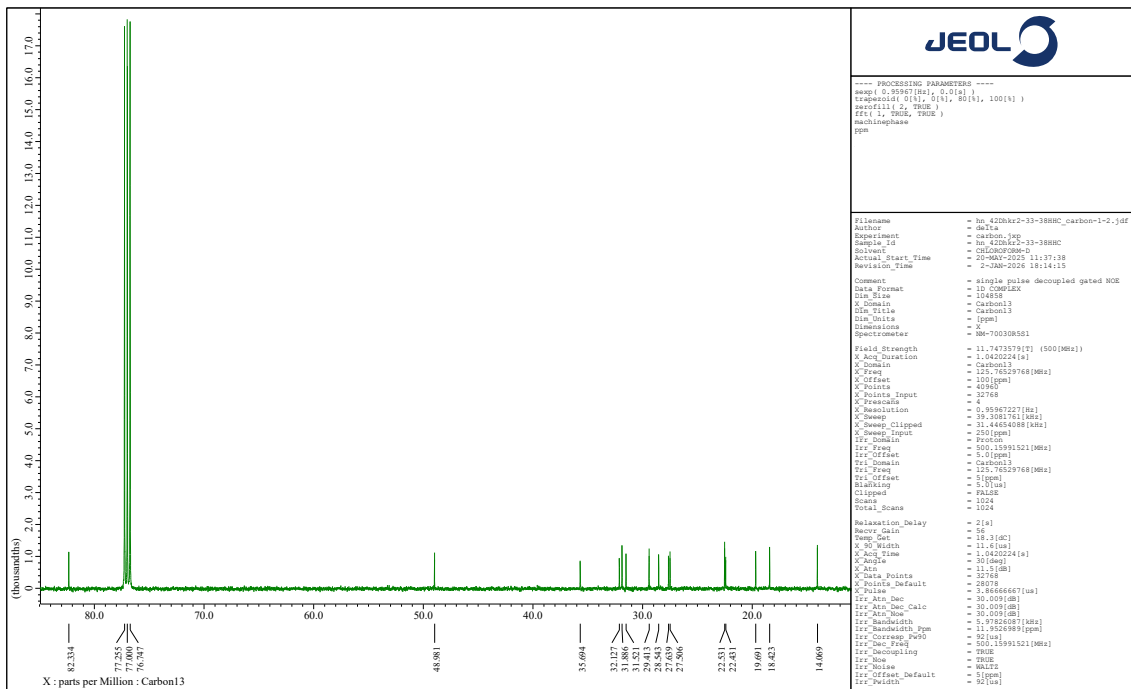
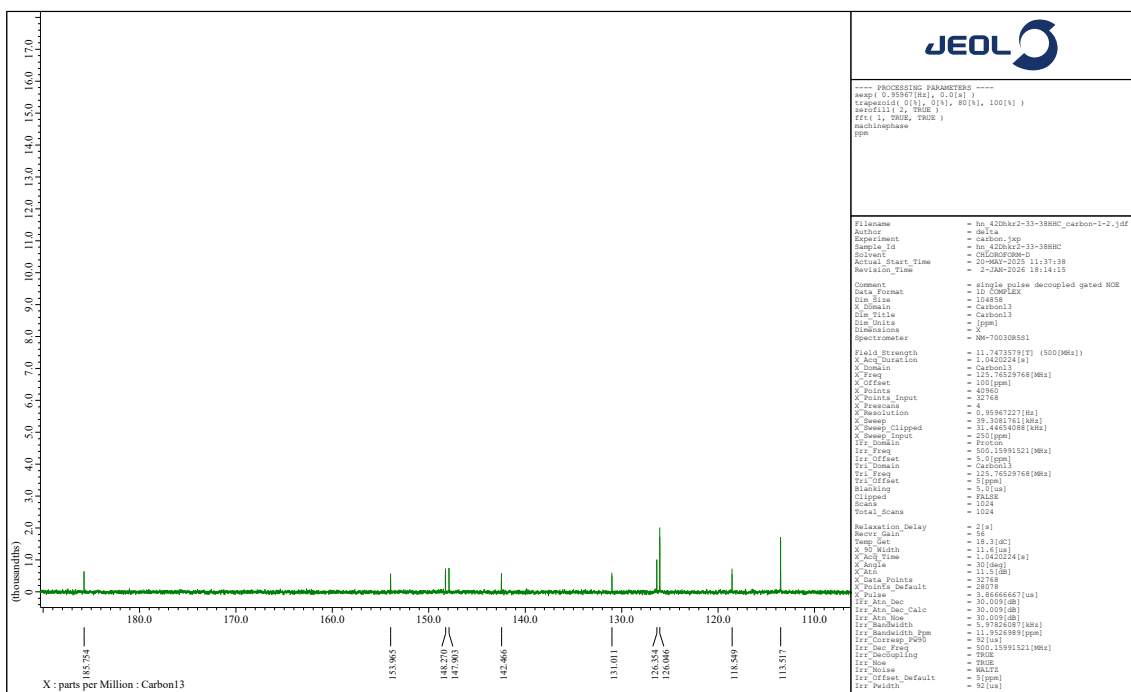


Figure S39. COSY spectrum of 12

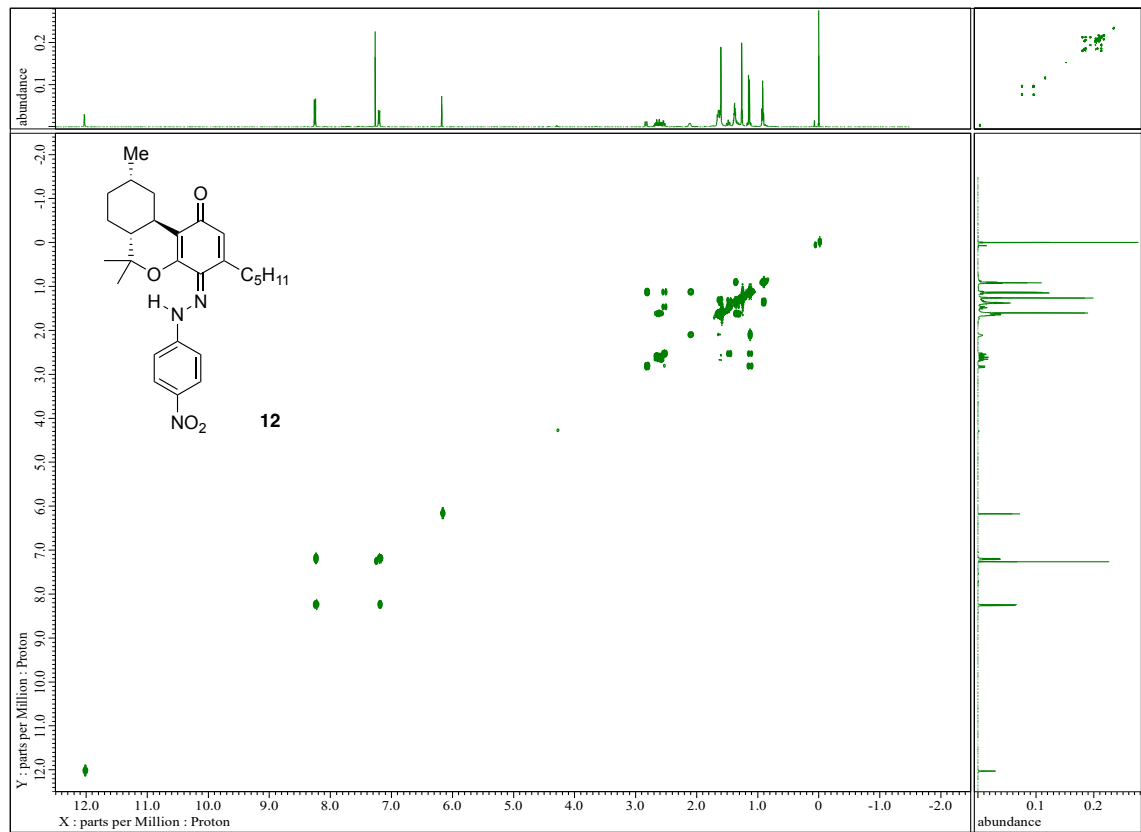


Figure S40. HSQC spectrum of 12

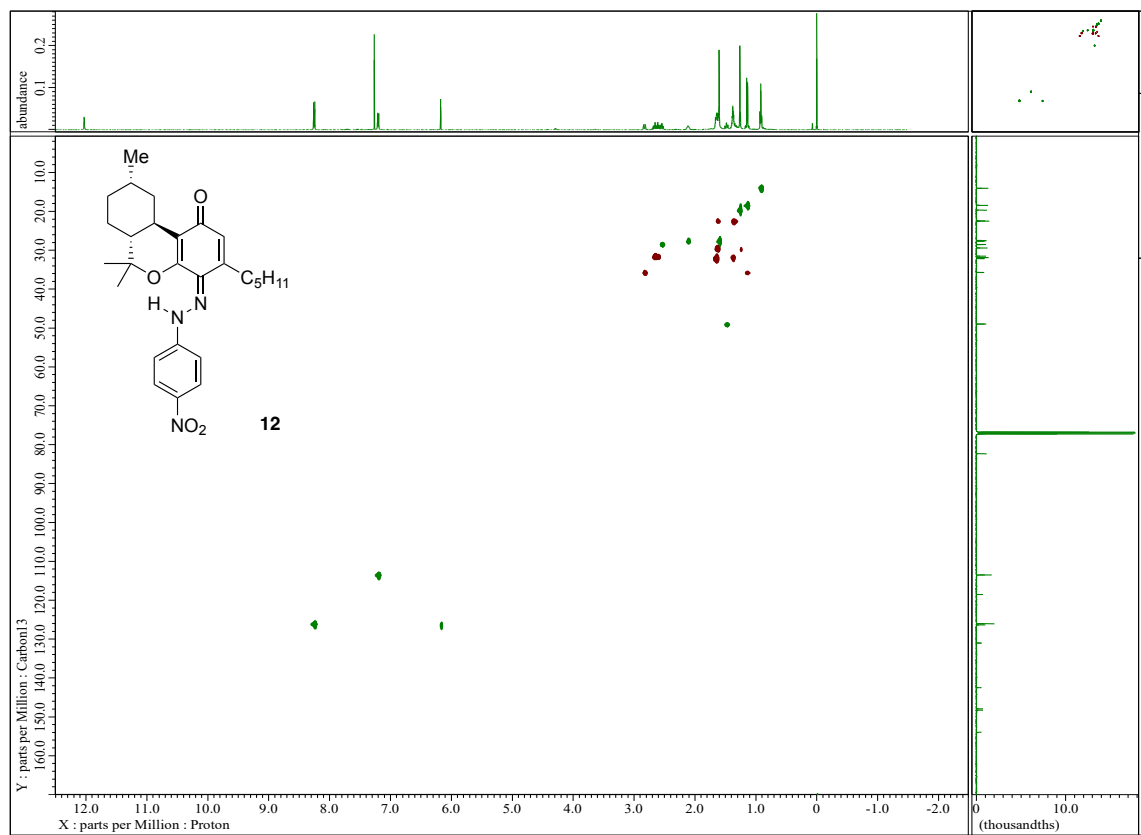


Figure S41. HMBC spectrum of **12**

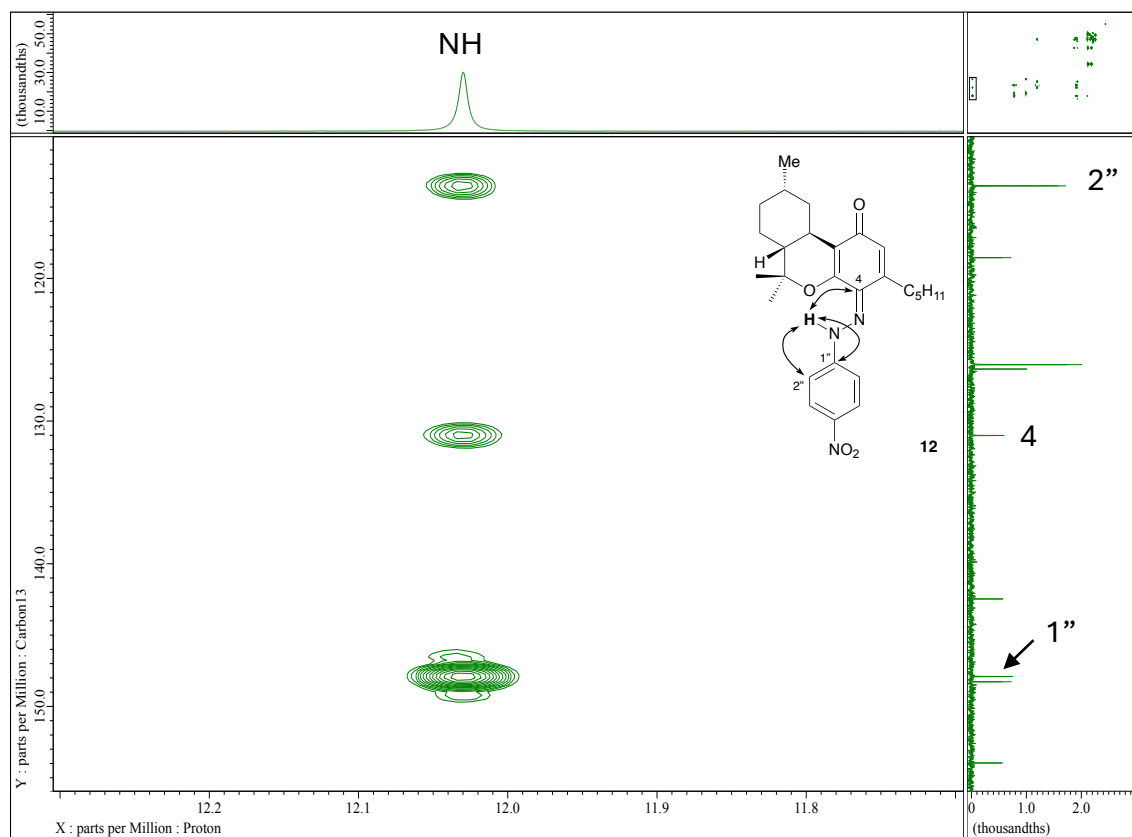
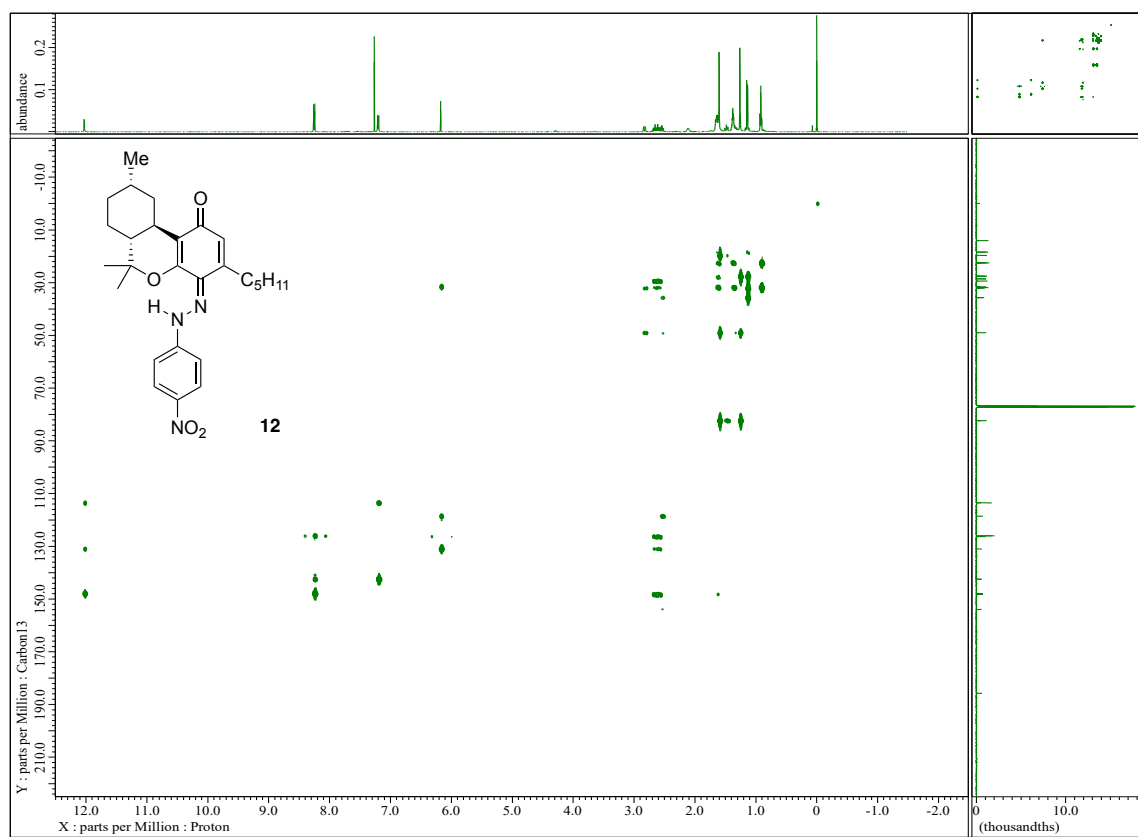


Figure S42. ROESY spectrum of **12**

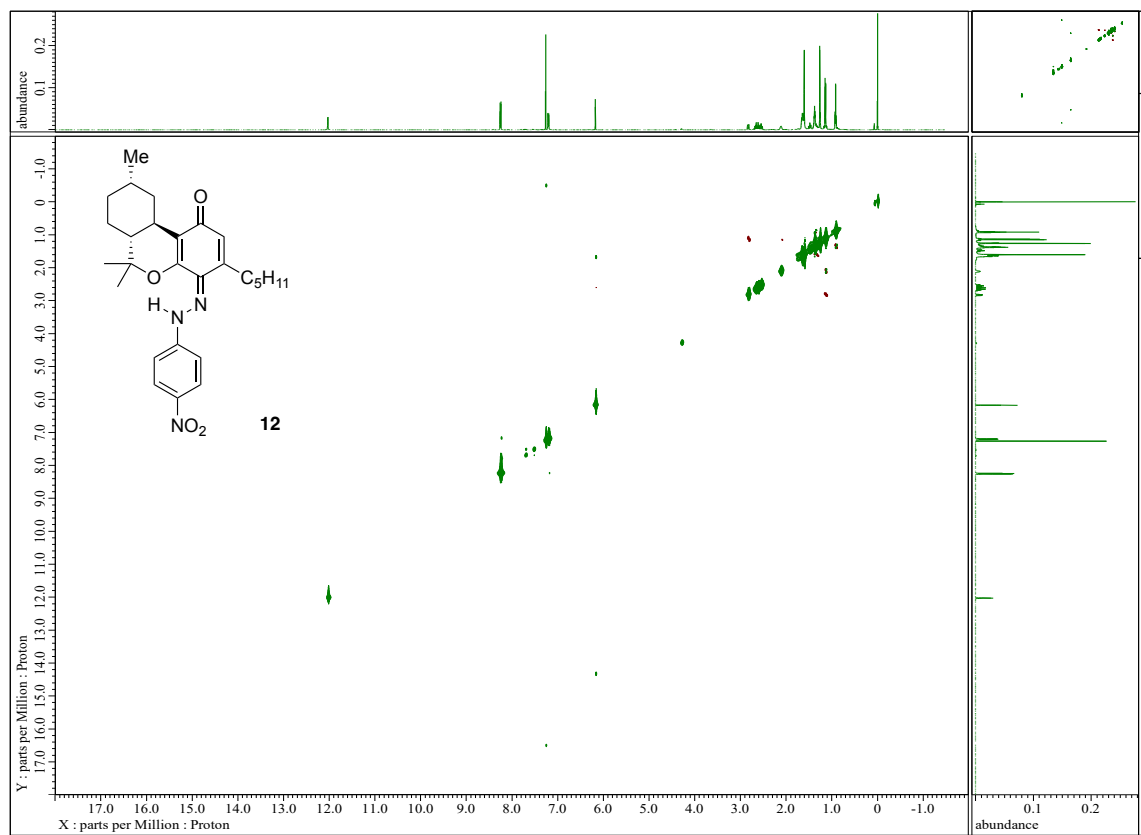
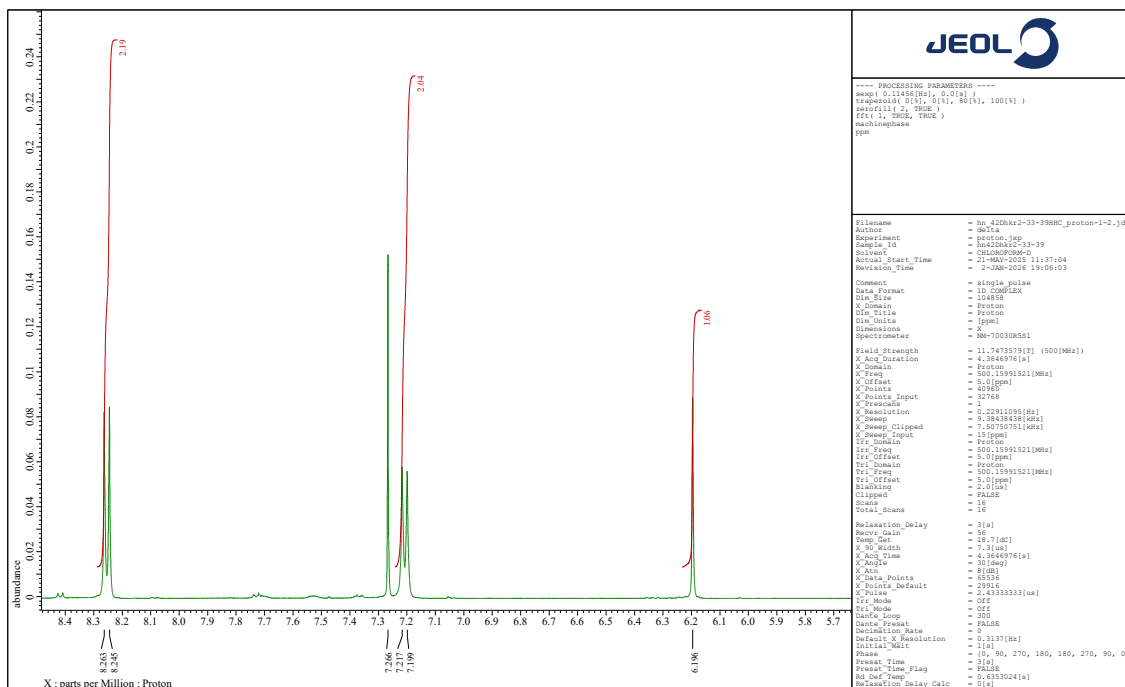
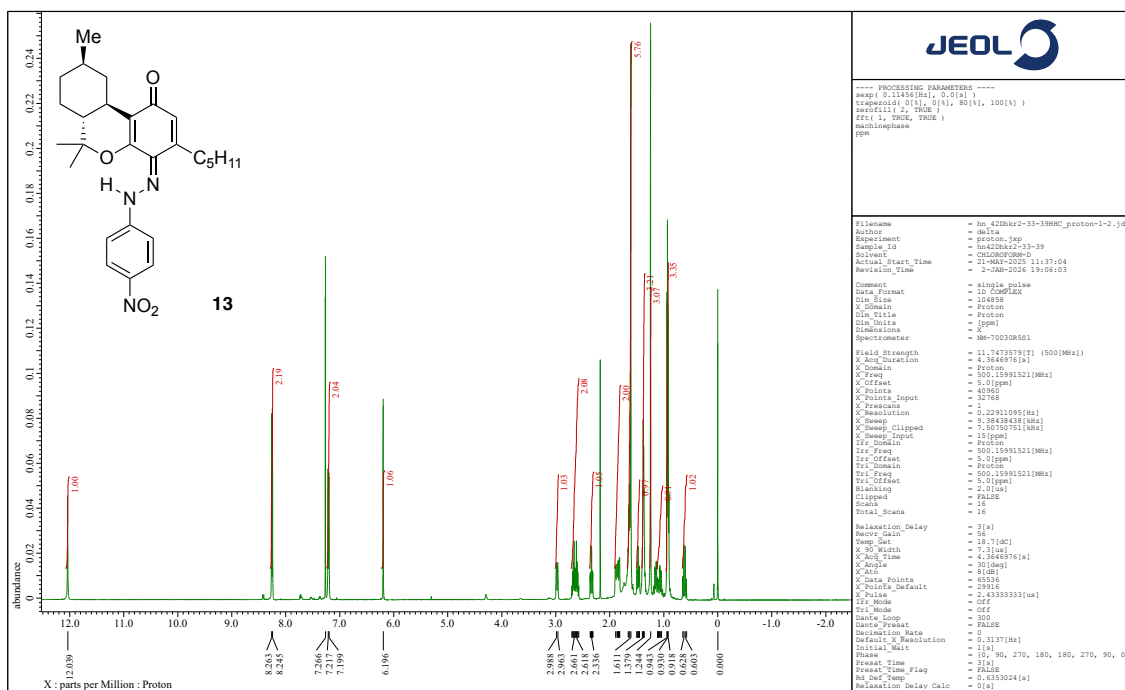


Figure S43. ^1H NMR (500 MHz, CDCl_3 , ppm) of **13**



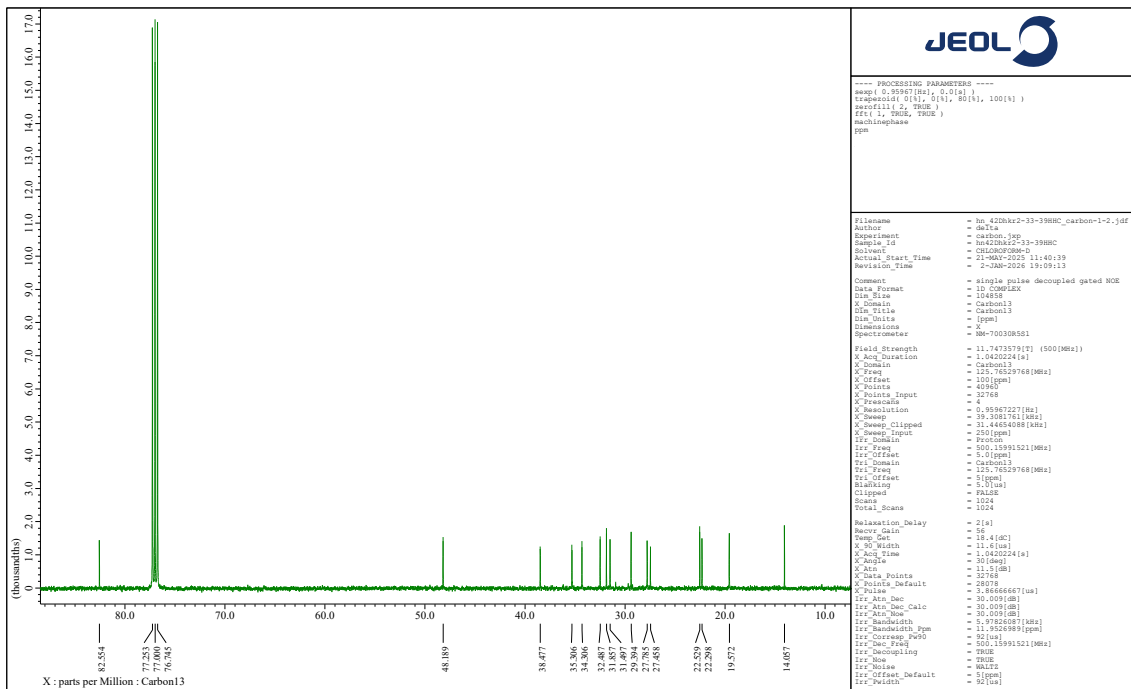
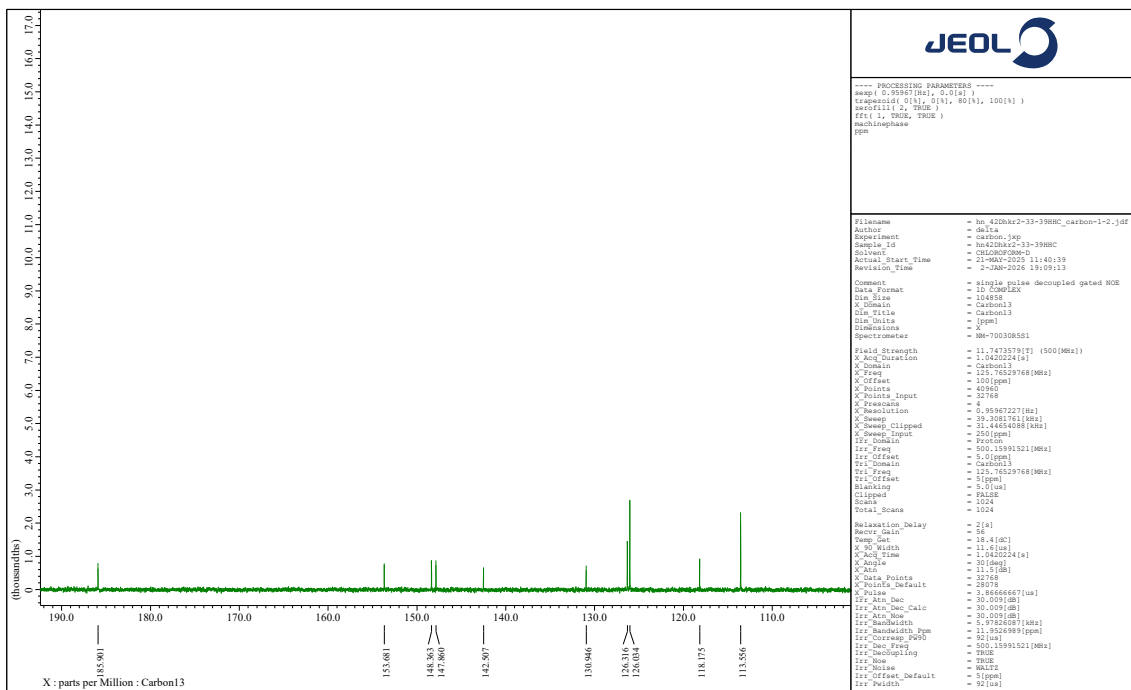


Figure S45. COSY spectrum of 13

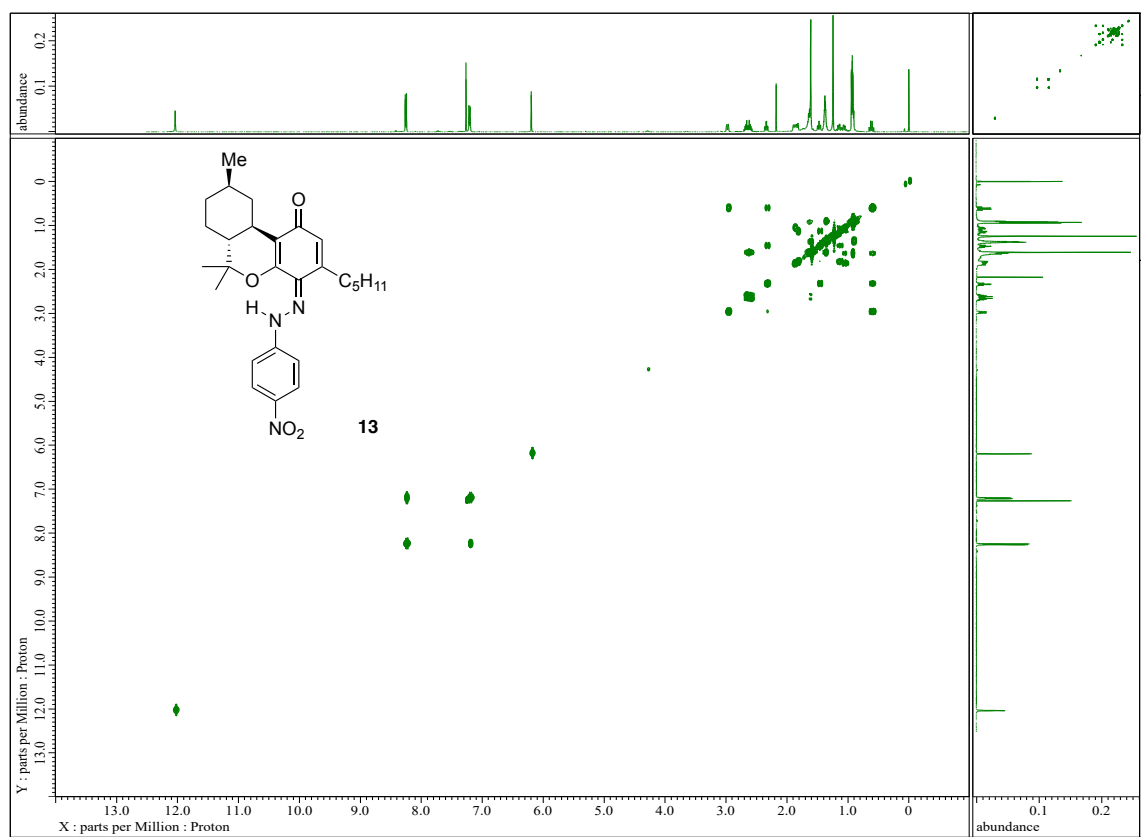


Figure S46. HSQC spectrum of 13

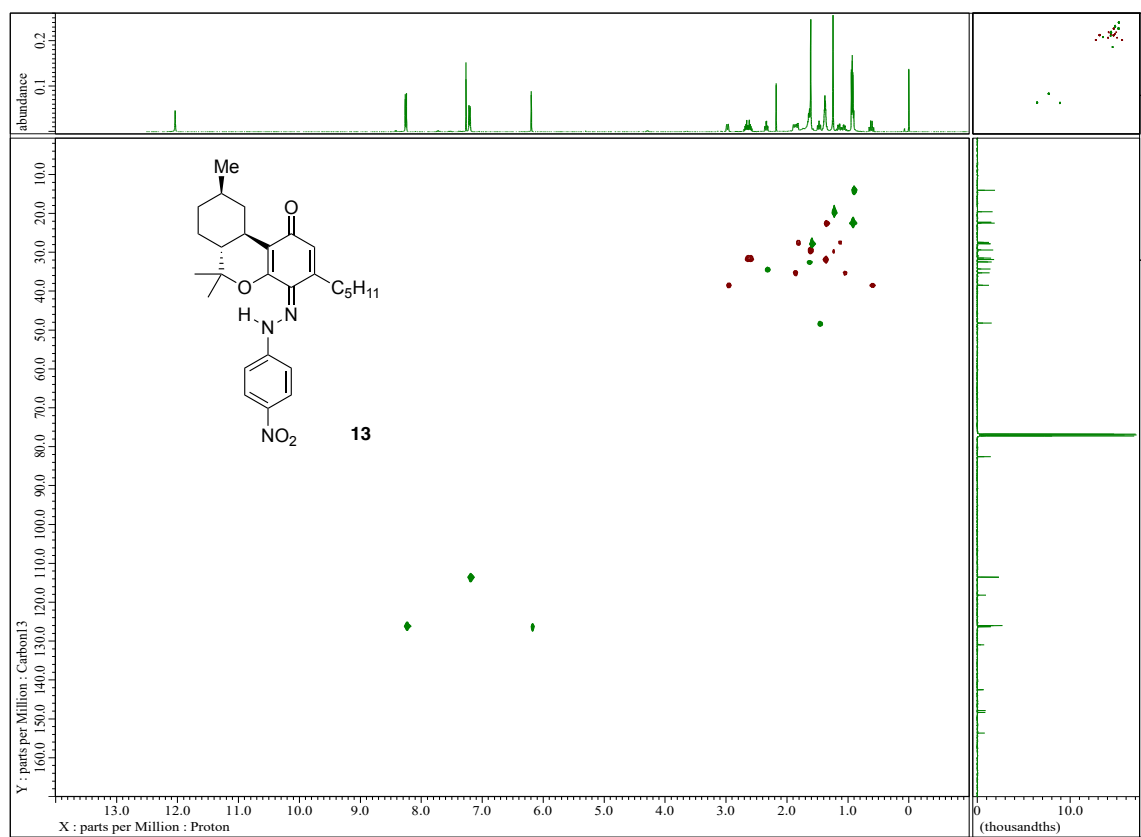


Figure S47. HMBC spectrum of 13

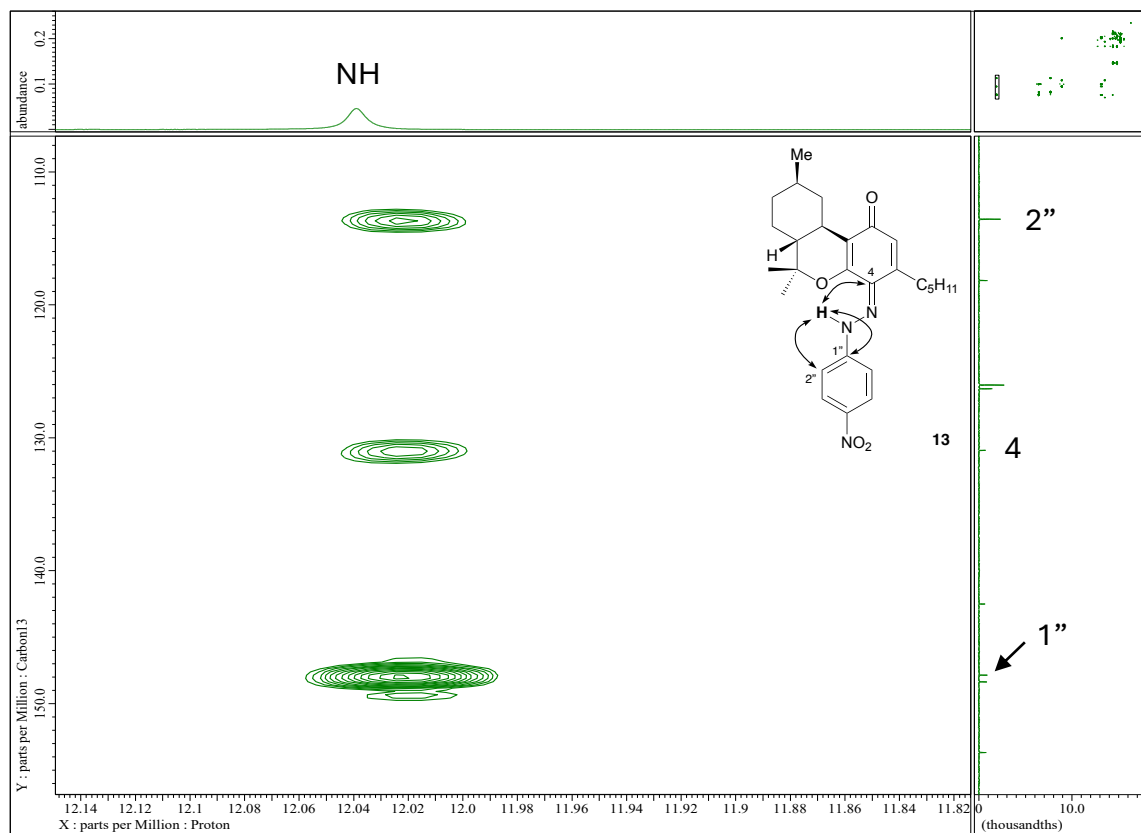
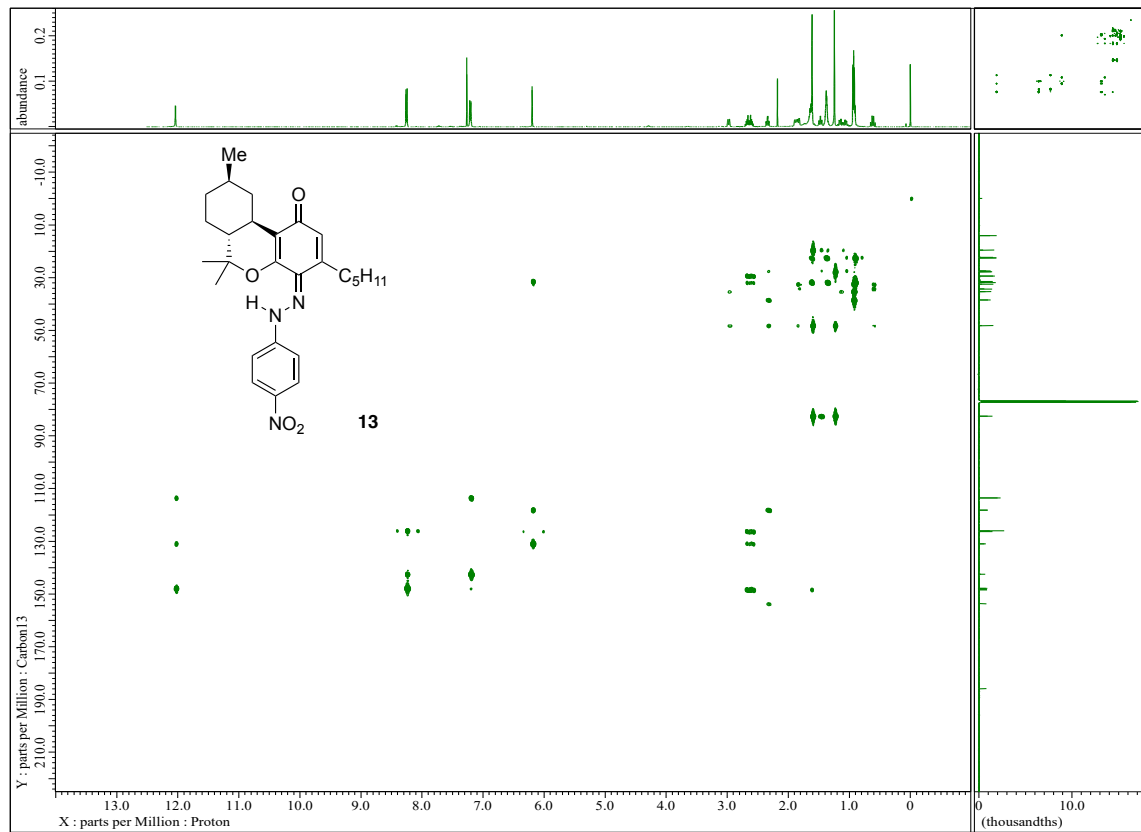
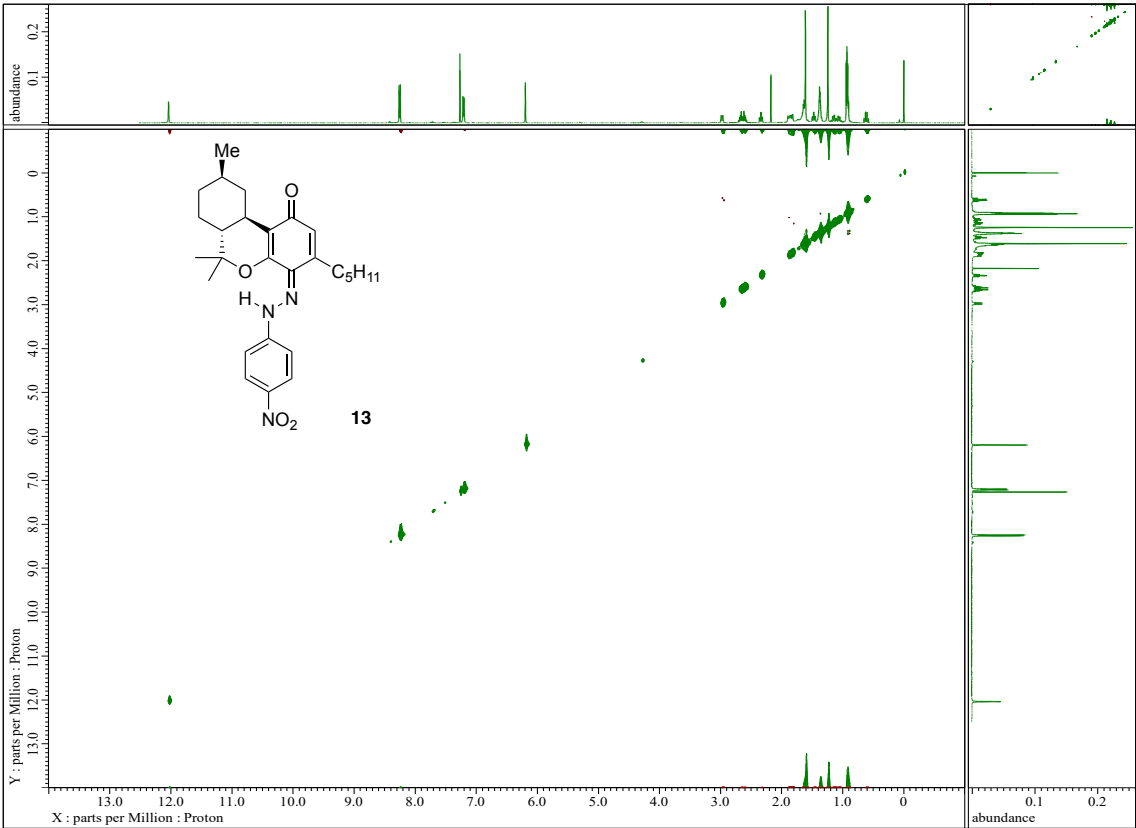
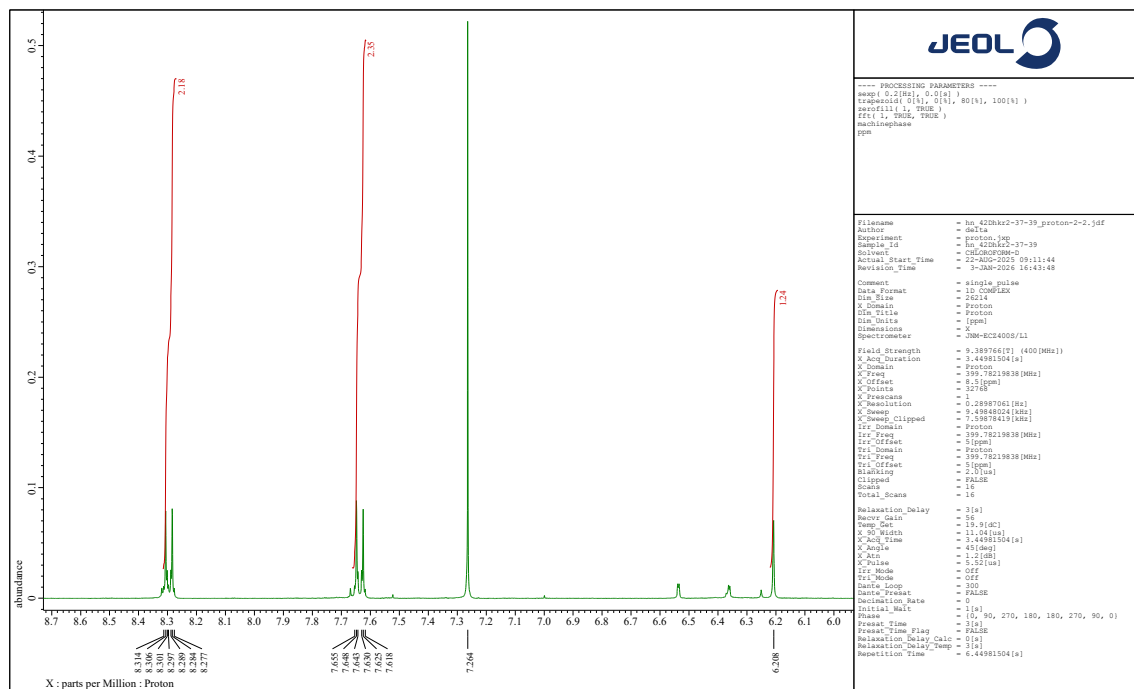
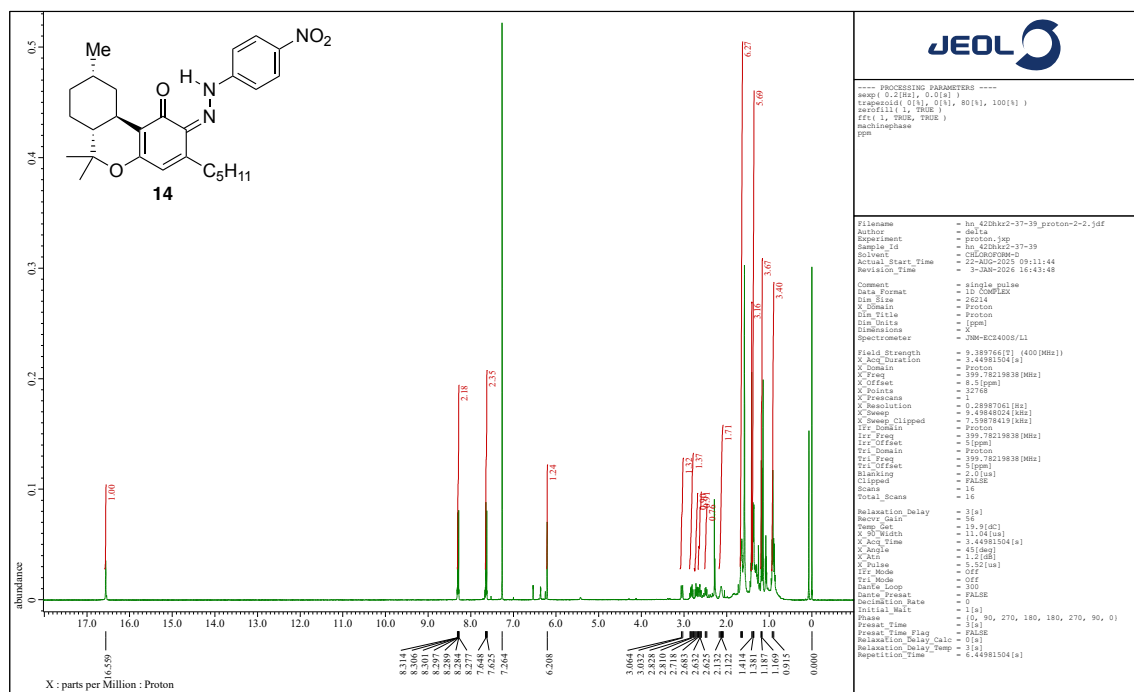


Figure S48. ROESY spectrum of **13**



9. NMR Spectra of 14

Figure S49. ¹H NMR (400 MHz, CDCl₃, ppm) of 14



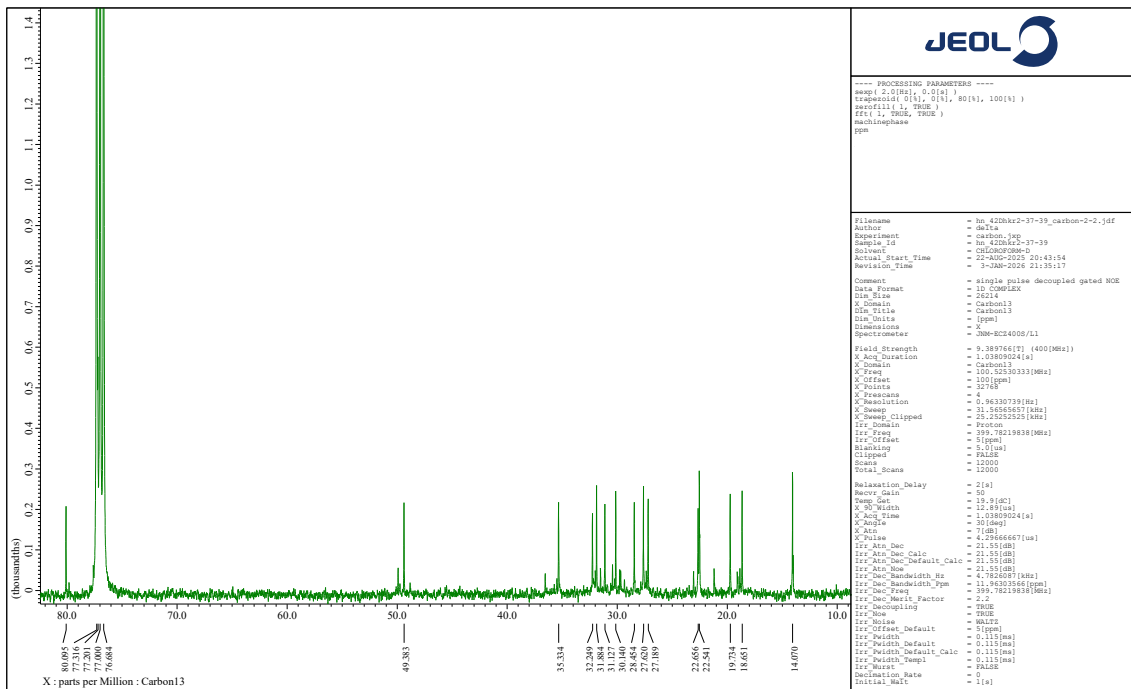
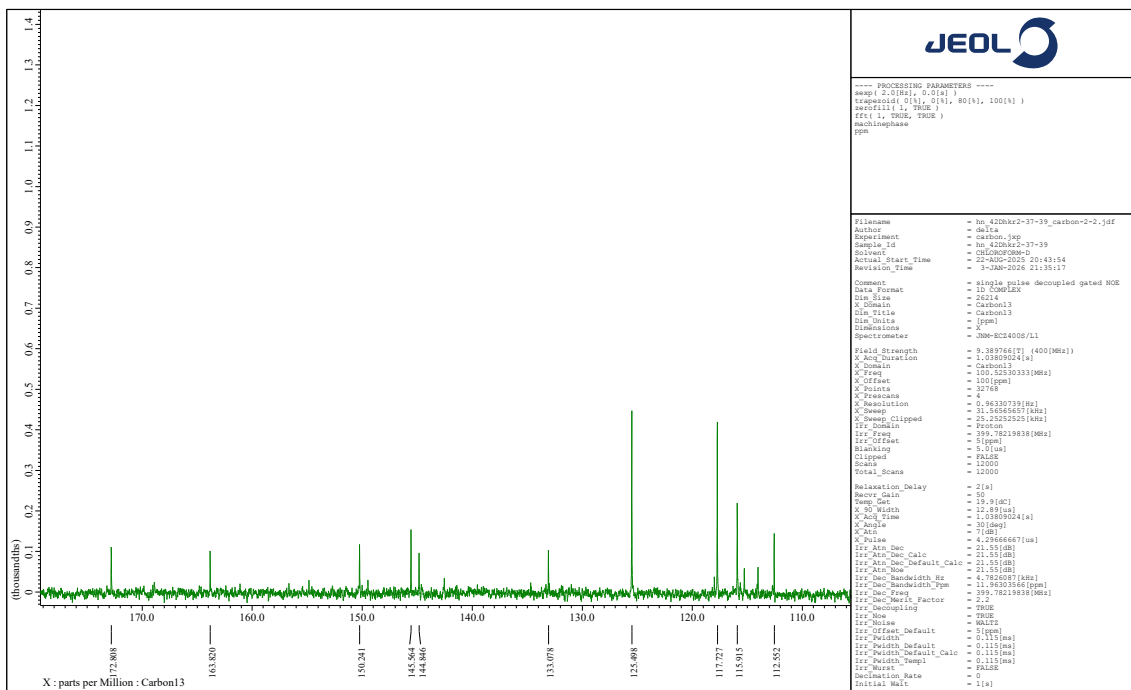


Figure S51. COSY spectrum of **14**

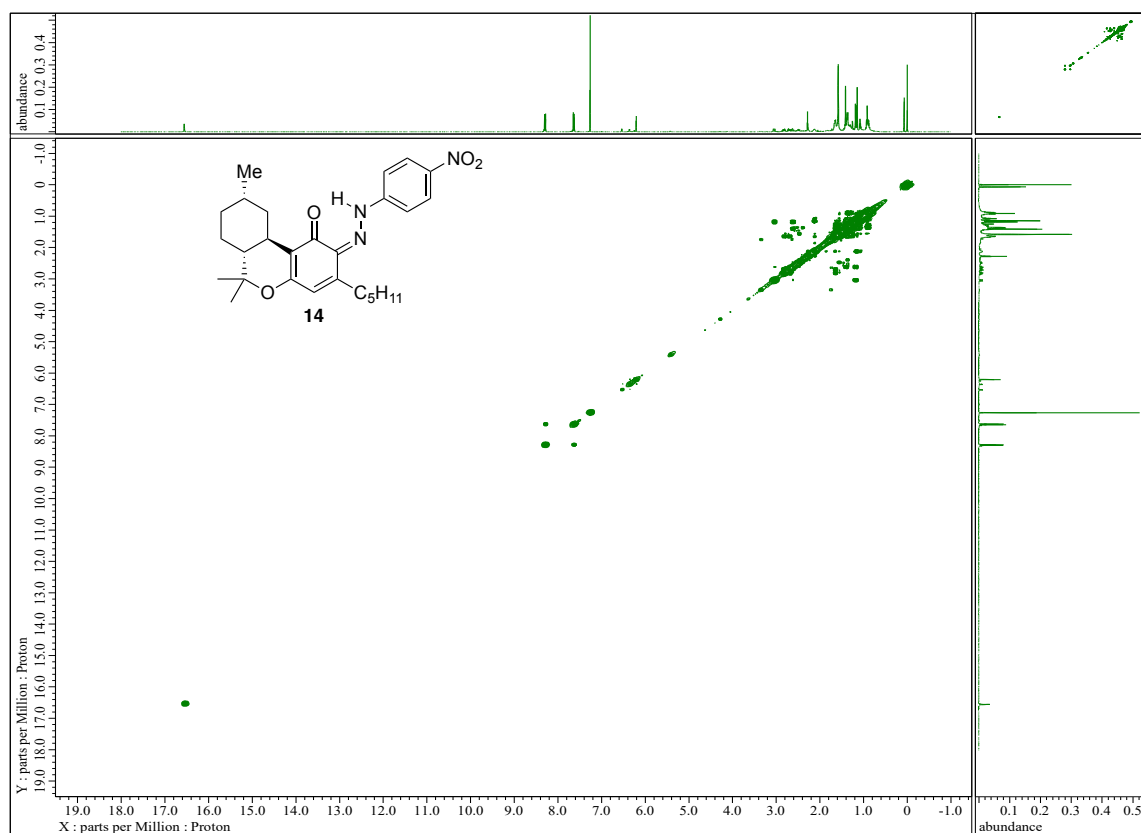


Figure S52. HSQC spectrum of **14**

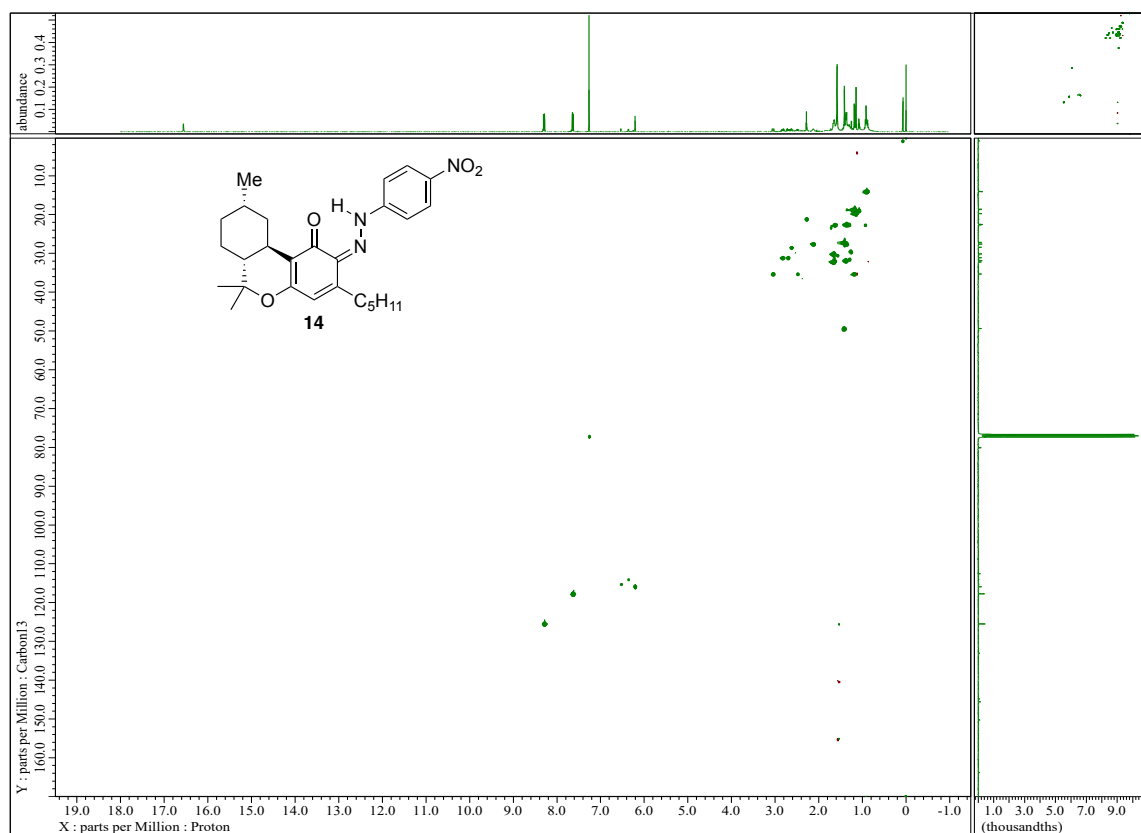


Figure S53. HMBC spectrum of **14**

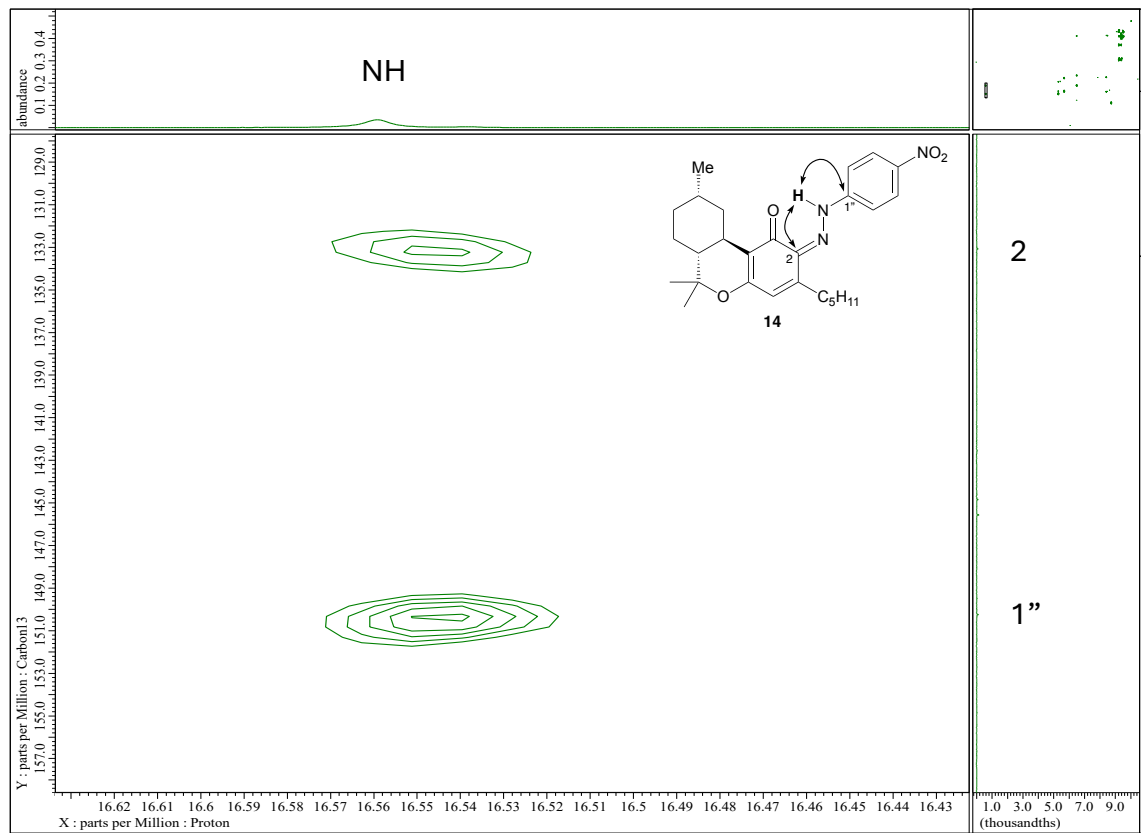
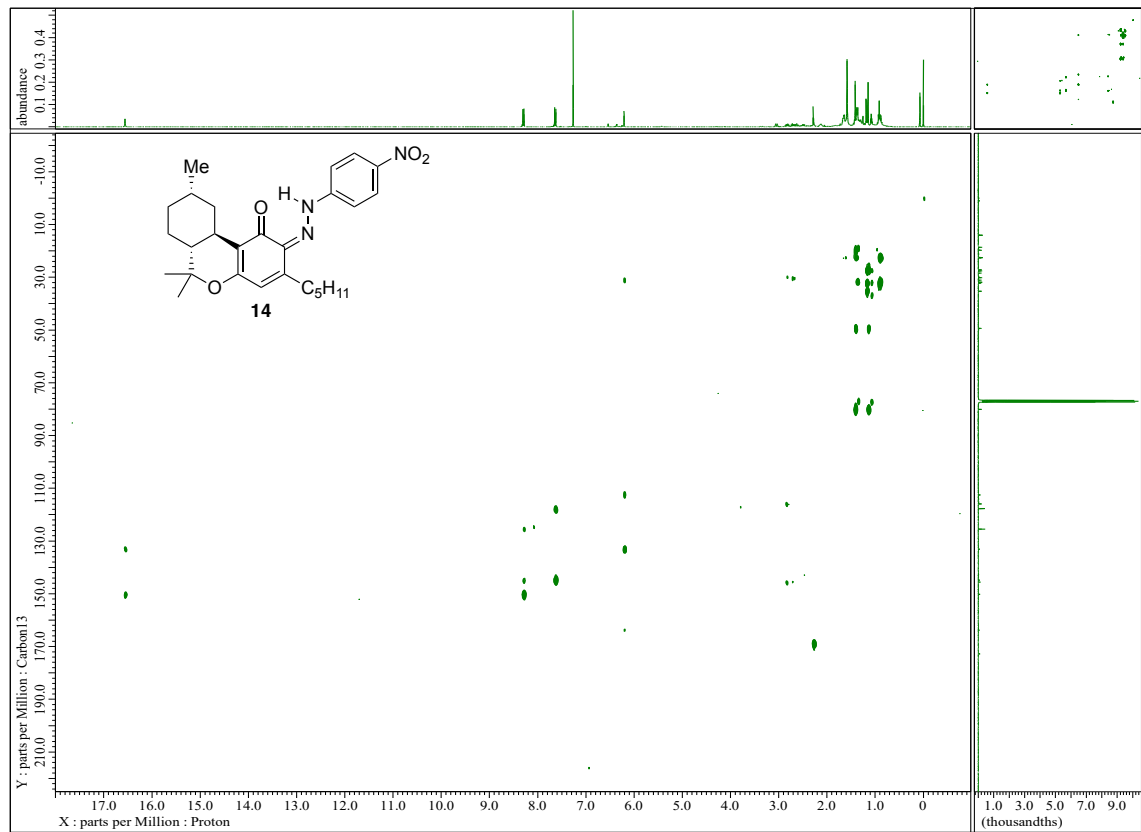


Figure S54. NOESY spectrum of **14**

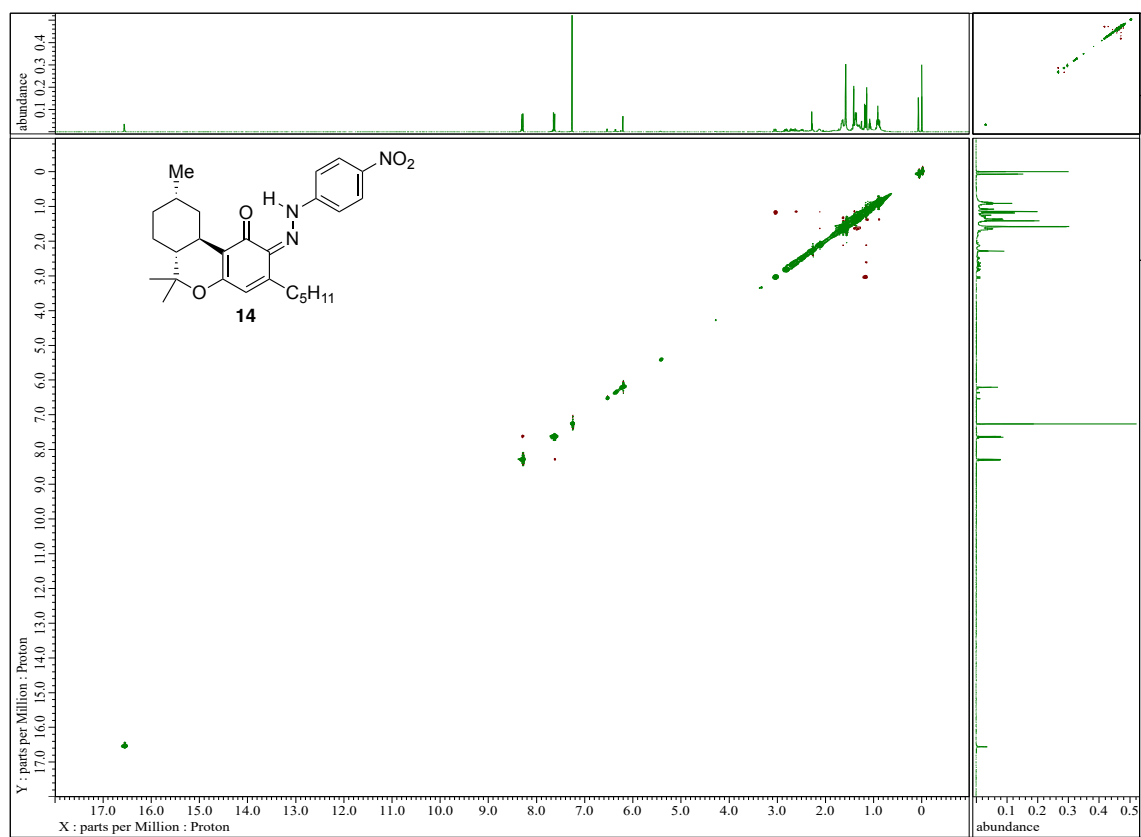
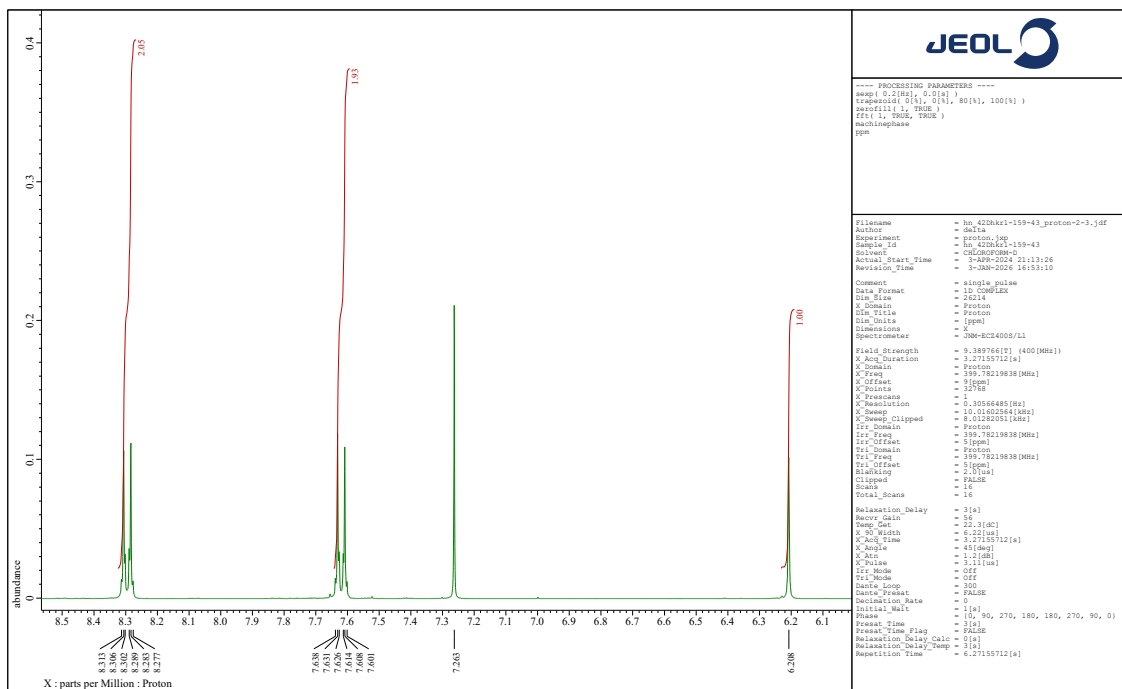


Figure S55. ^1H NMR (400 MHz, CDCl_3 , ppm) of **15**



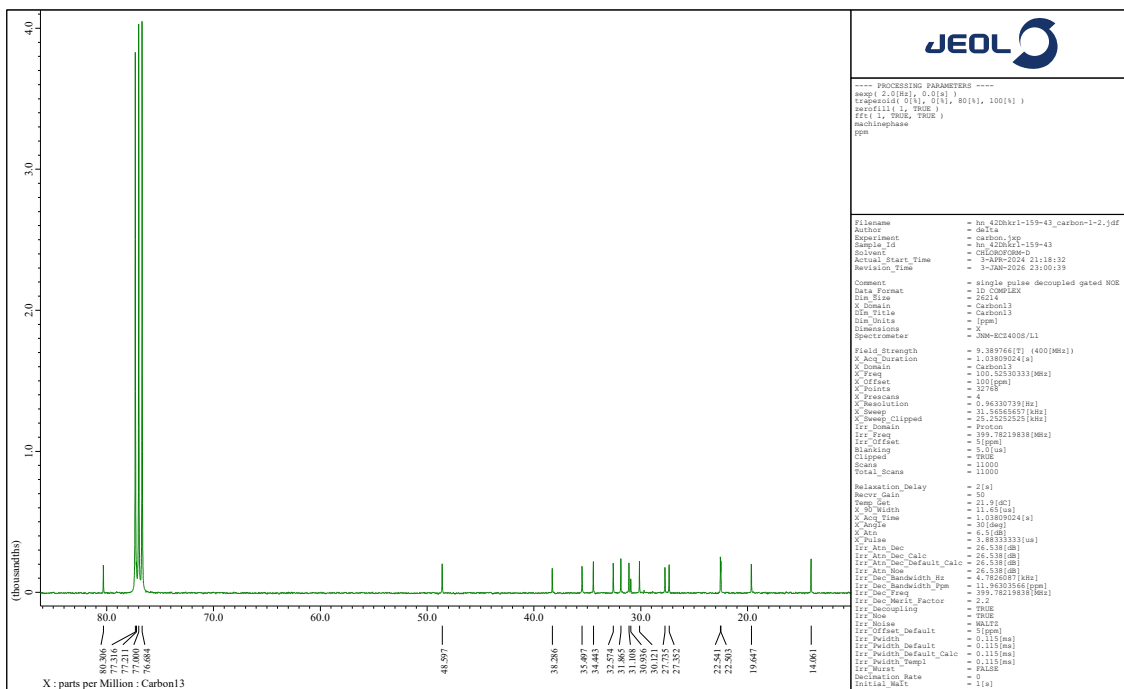
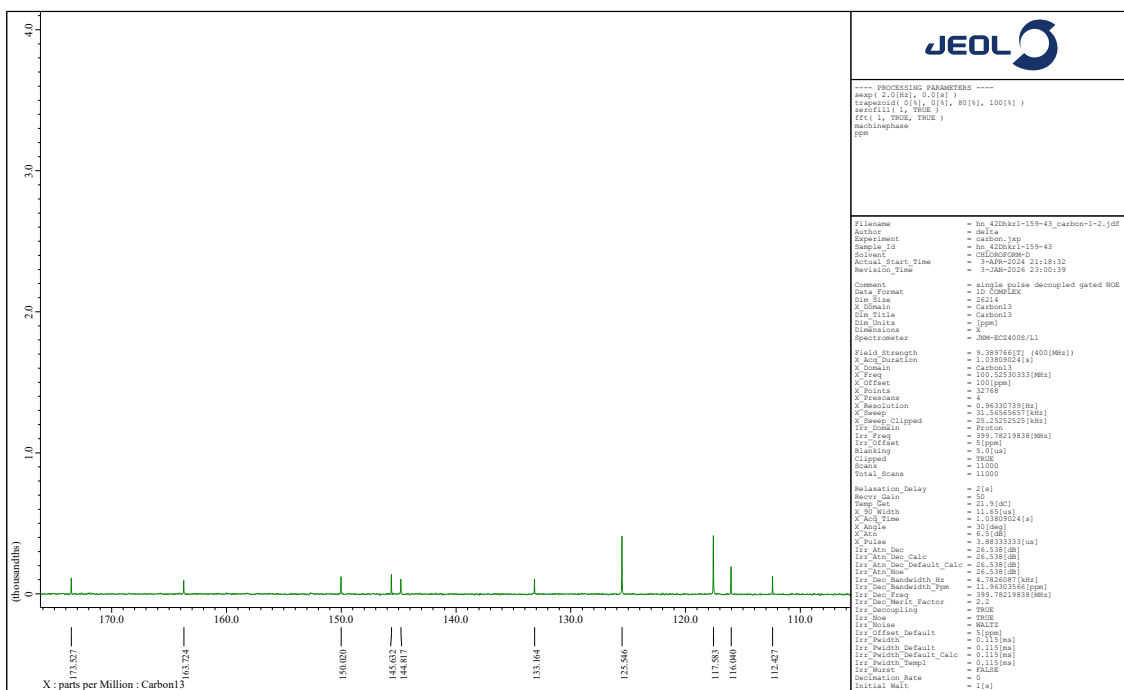


Figure S57. COSY spectrum of 15

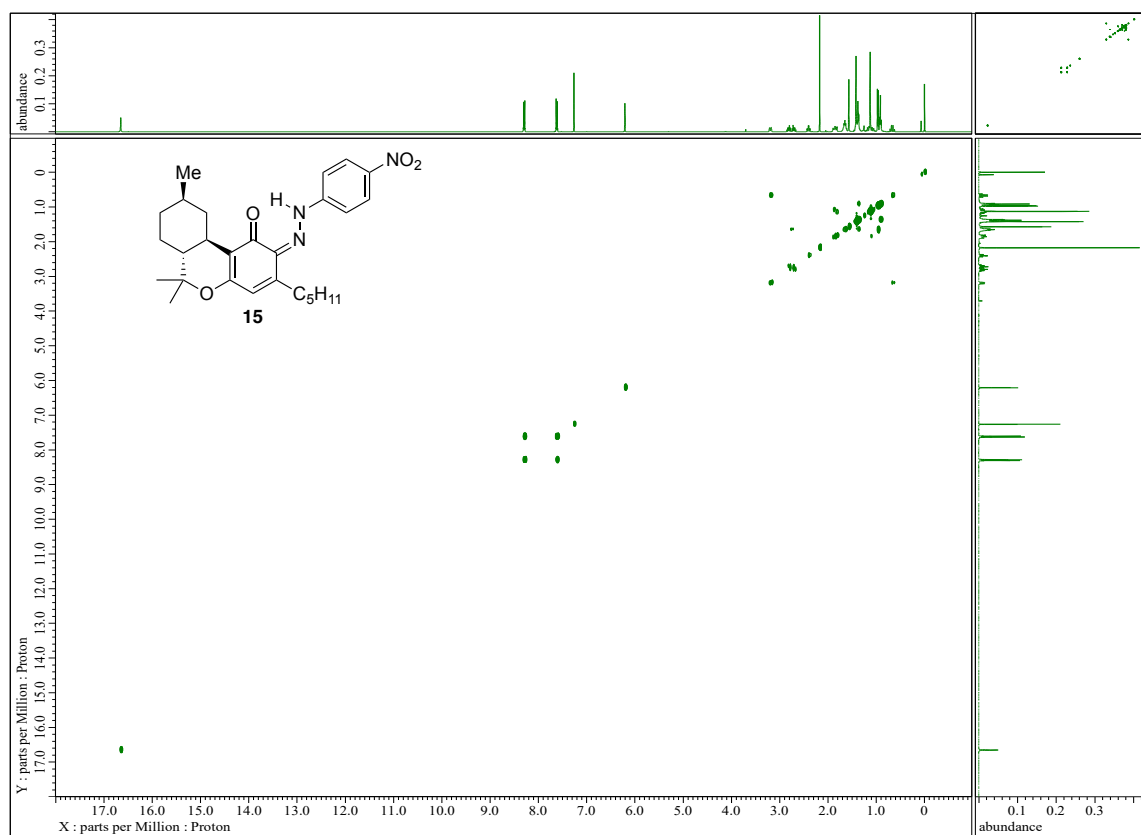


Figure S58. HSQC spectrum of 15

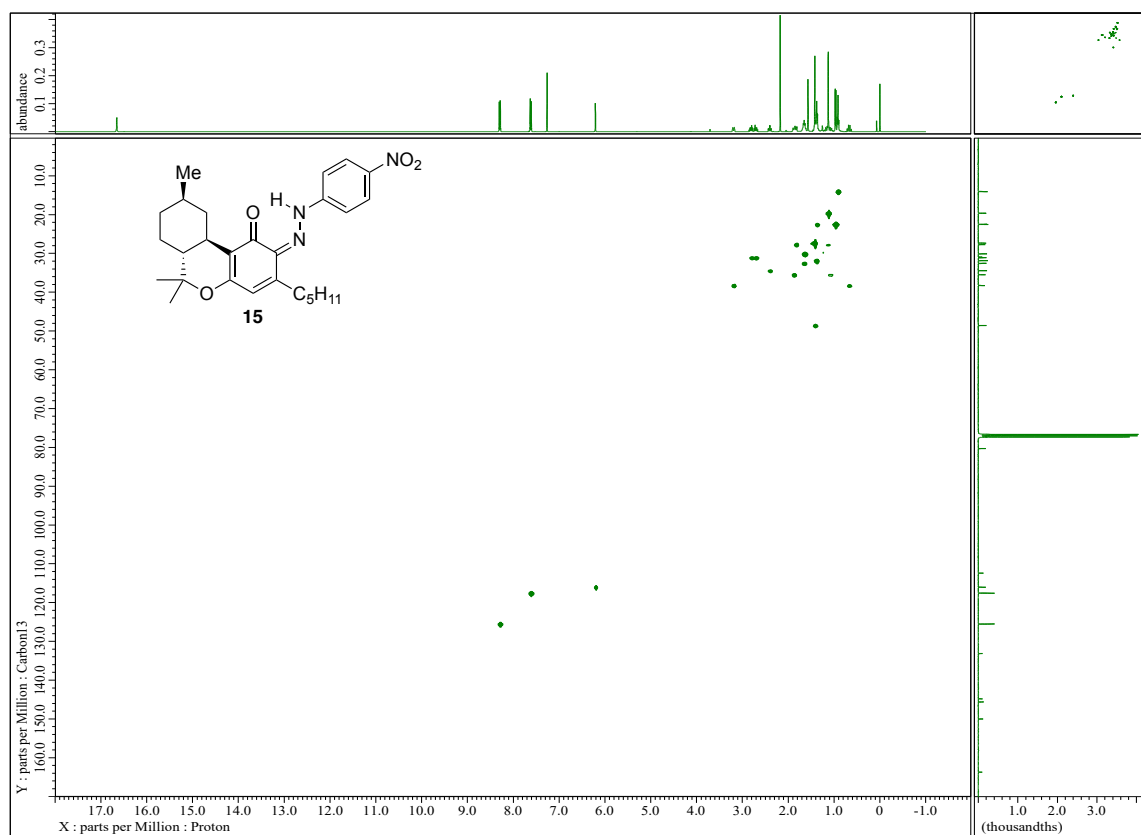


Figure S59. HMBC spectrum of 15

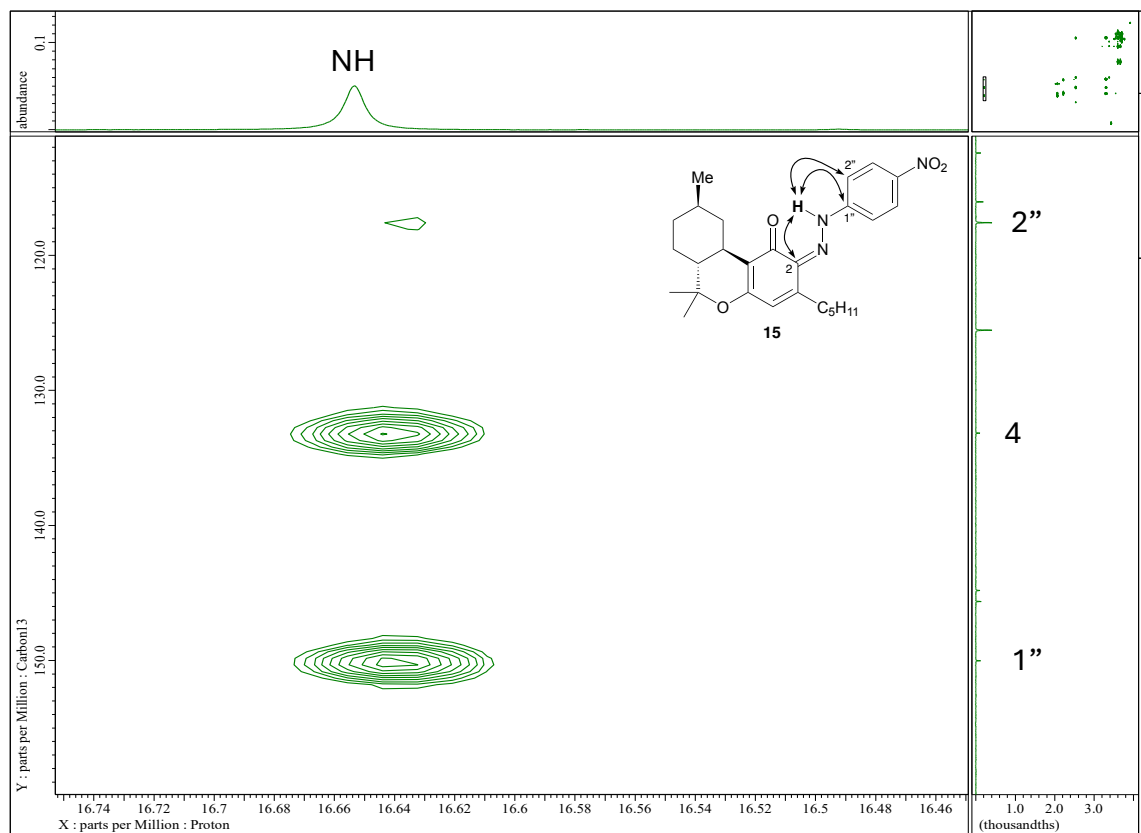
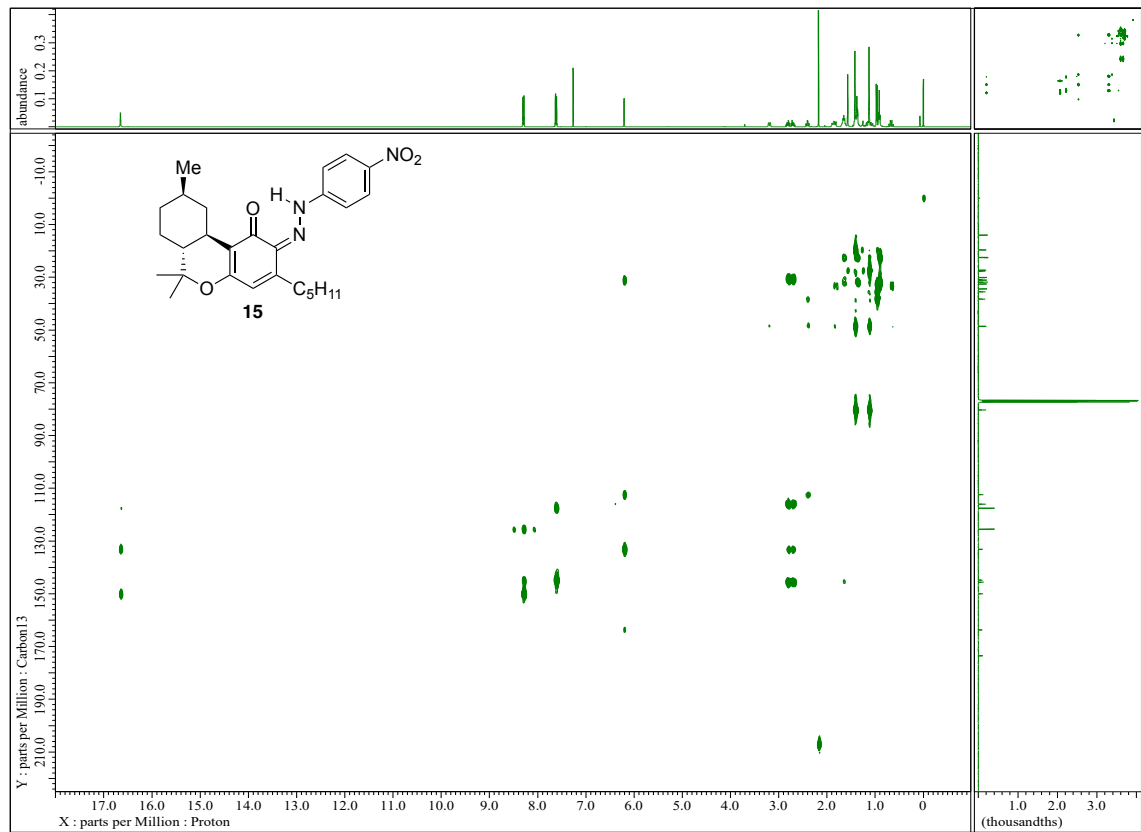


Figure S60. NOESY spectrum of **15**

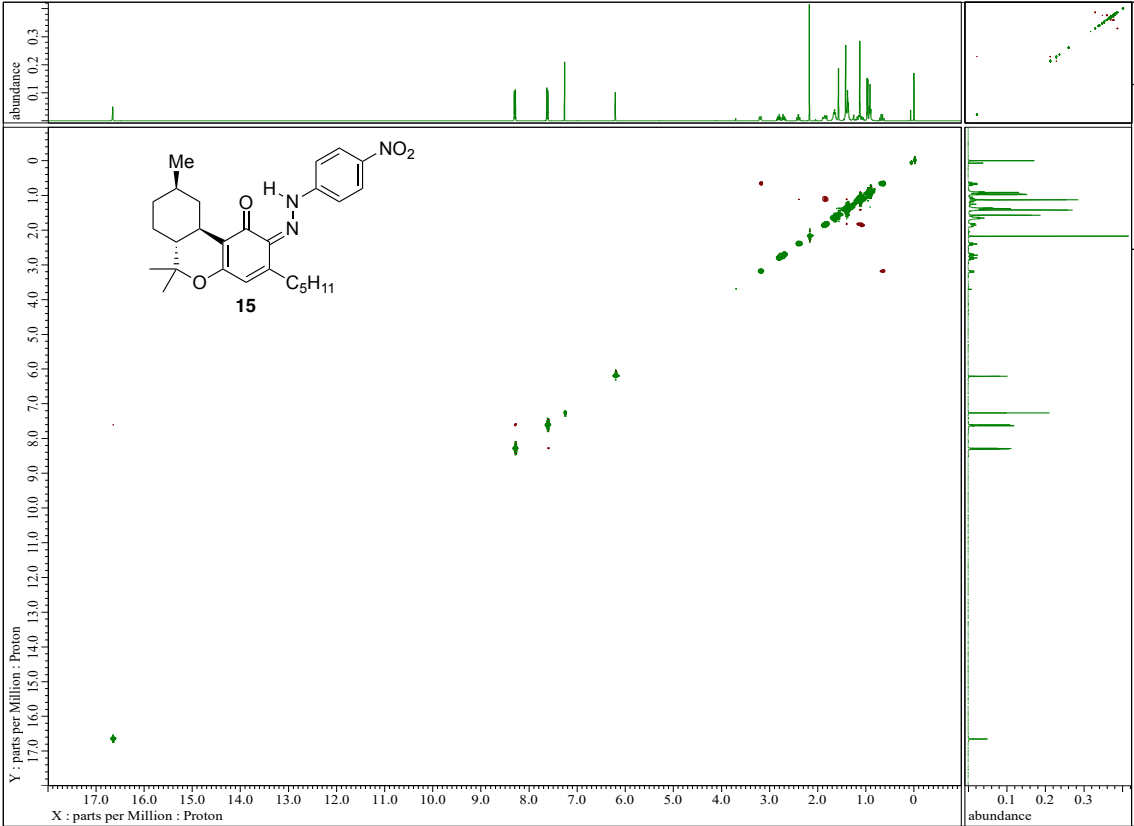


Figure S61. ^1H NMR (400 MHz, CDCl_3 , ppm) of **16**

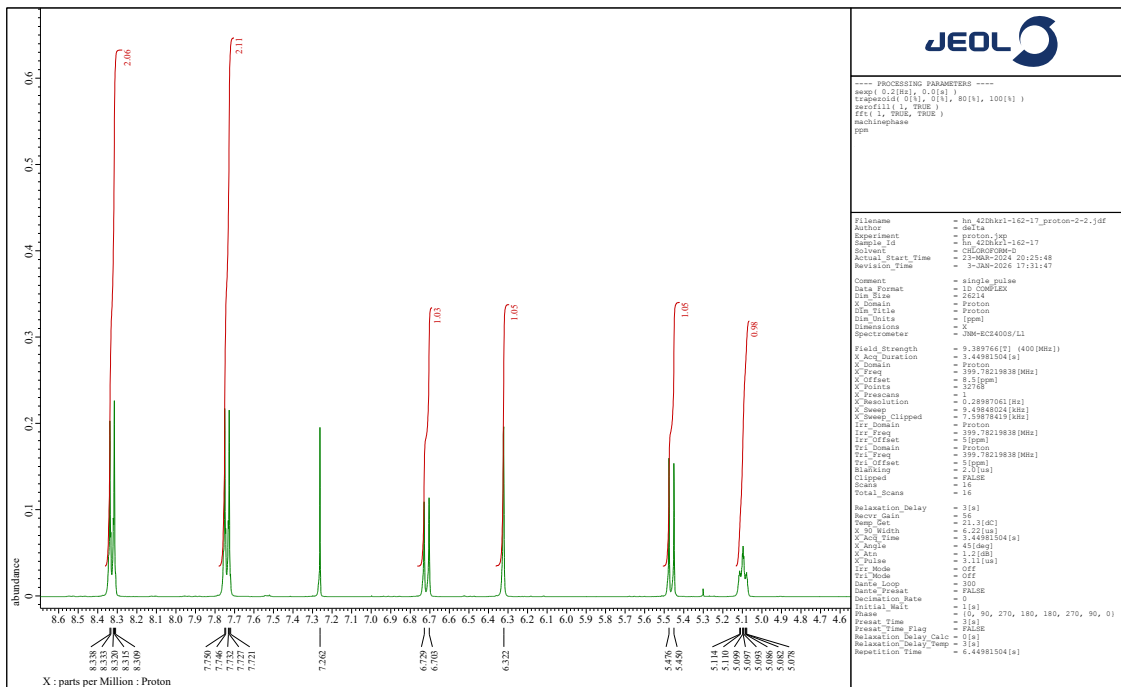


Figure S63. COSY spectrum of 16

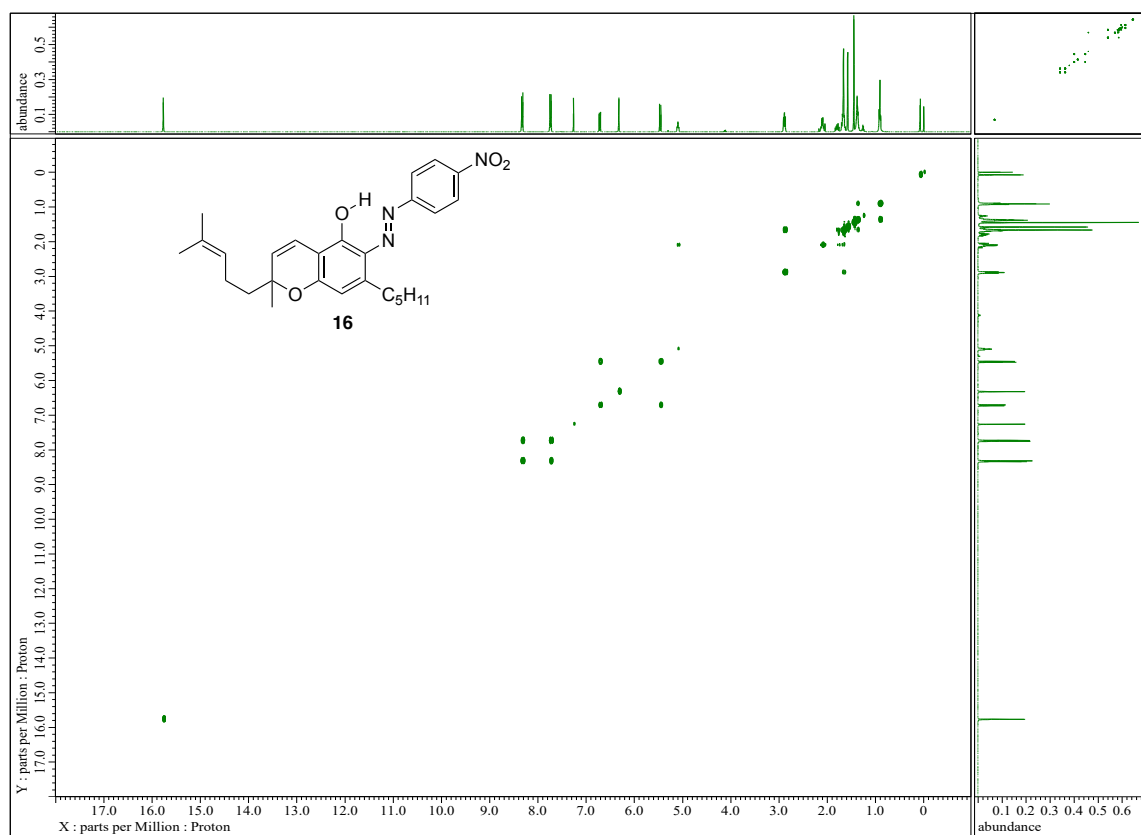


Figure S64. HSQC spectrum of 16

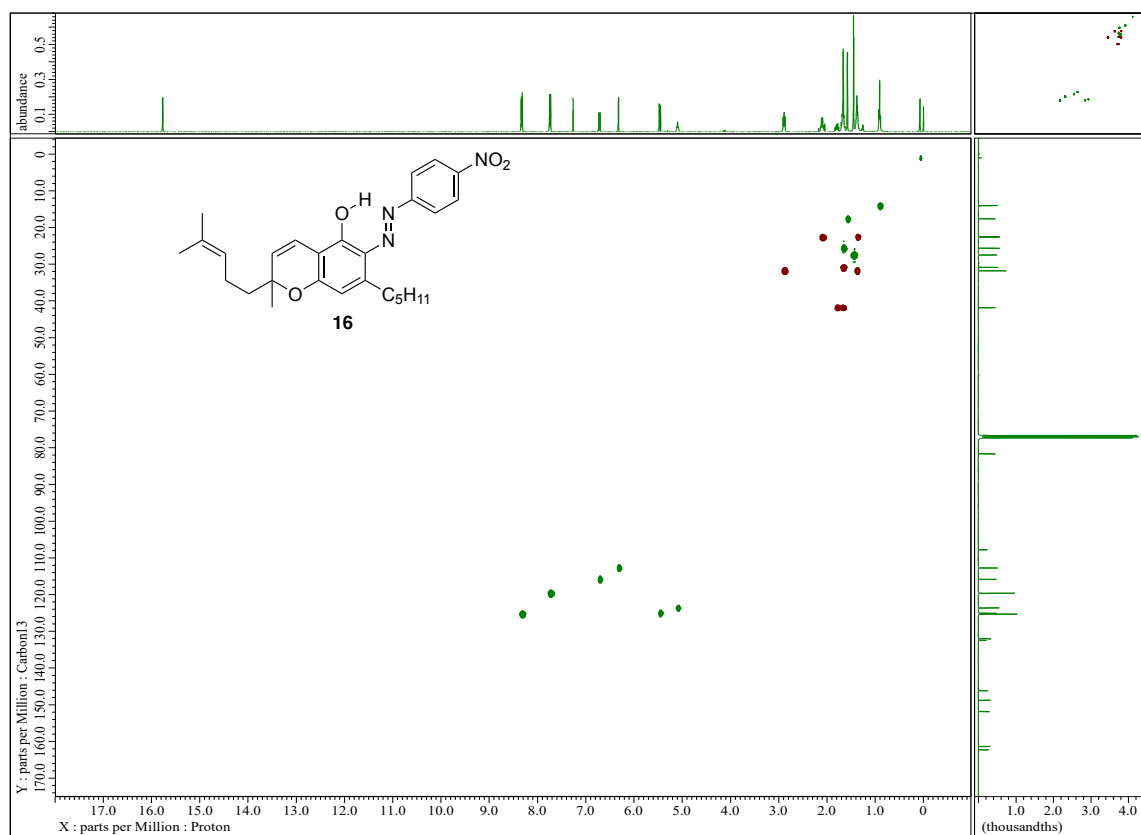


Figure S65. HMBC spectrum of **16**

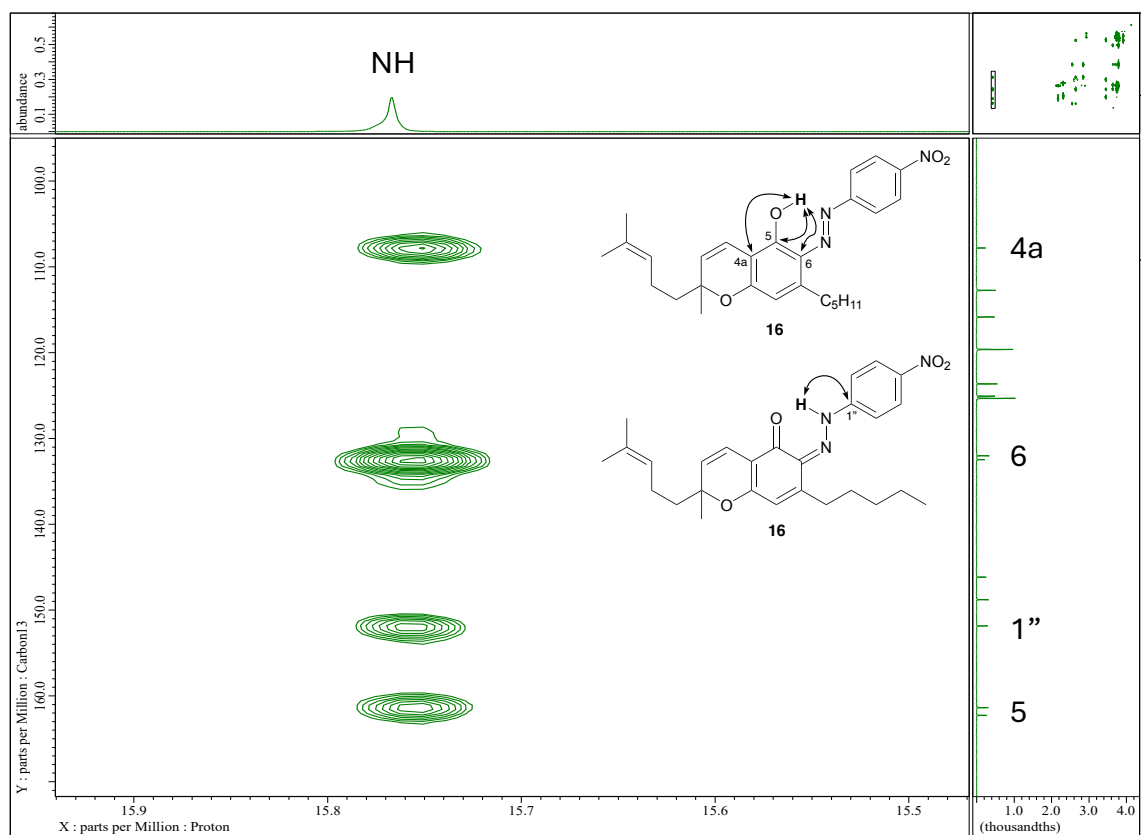
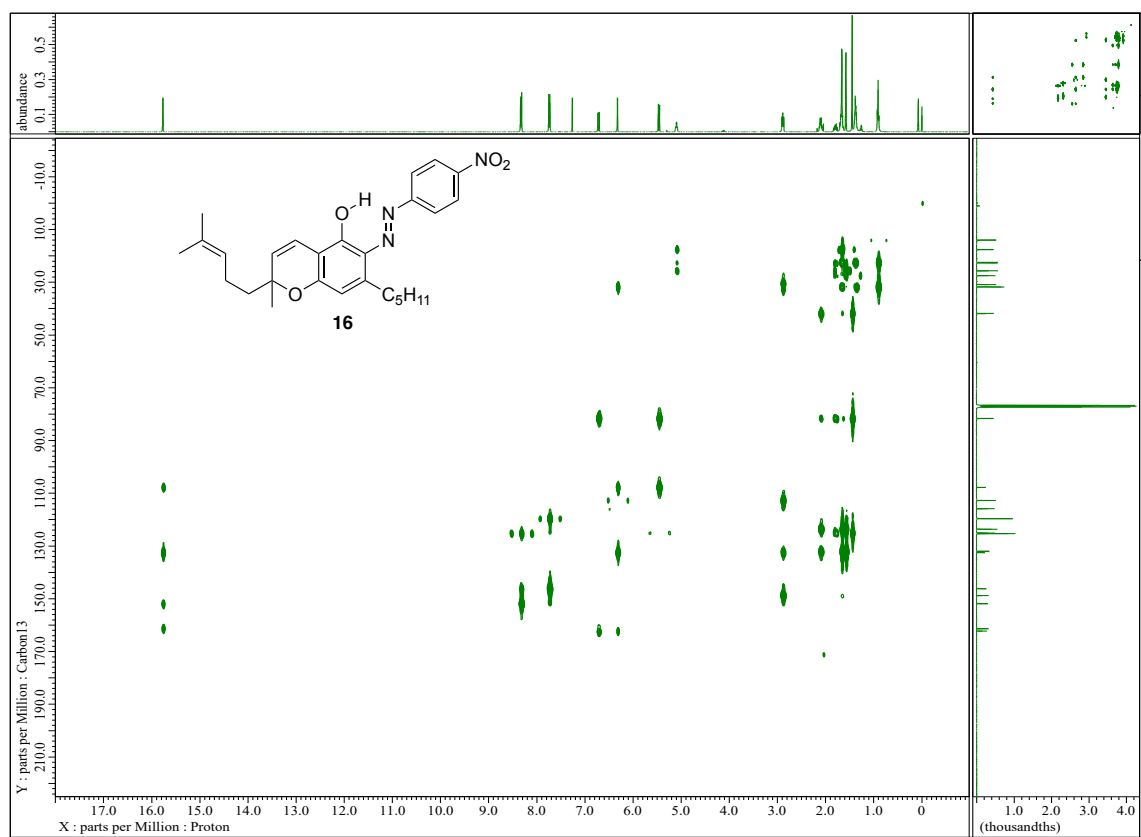


Figure S66. NOESY spectrum of **16**

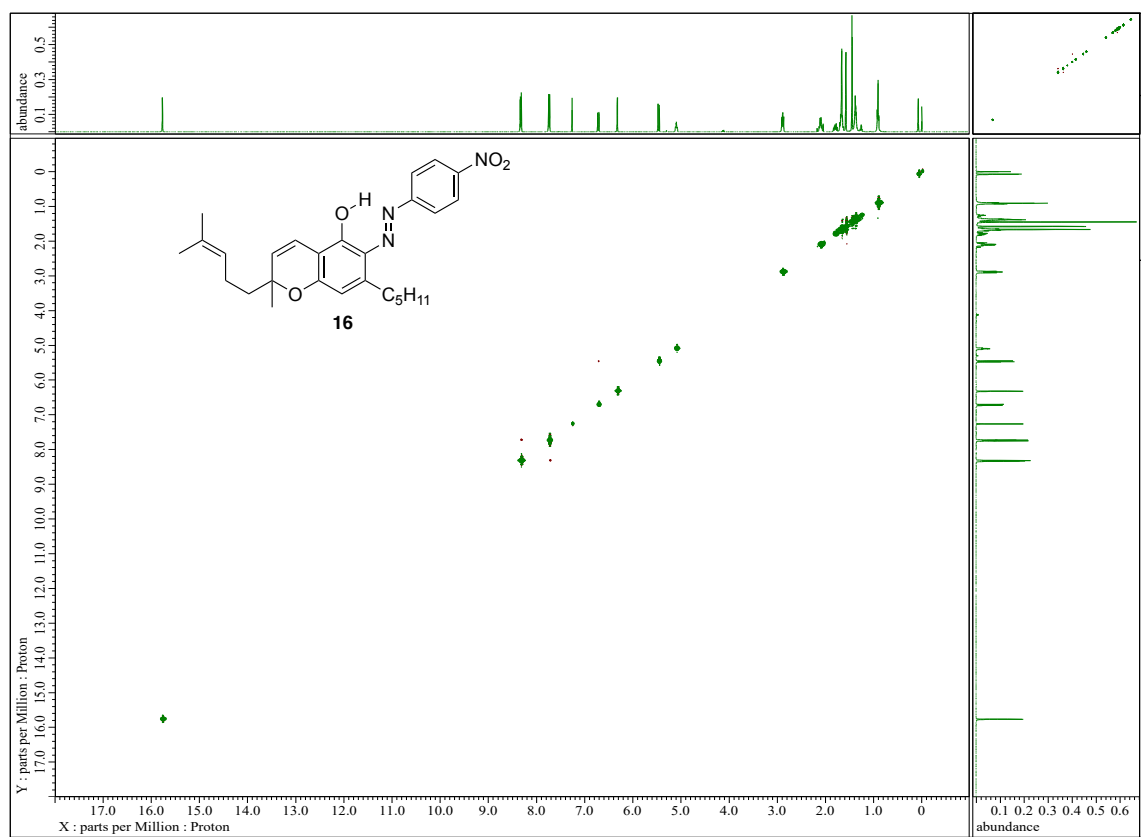
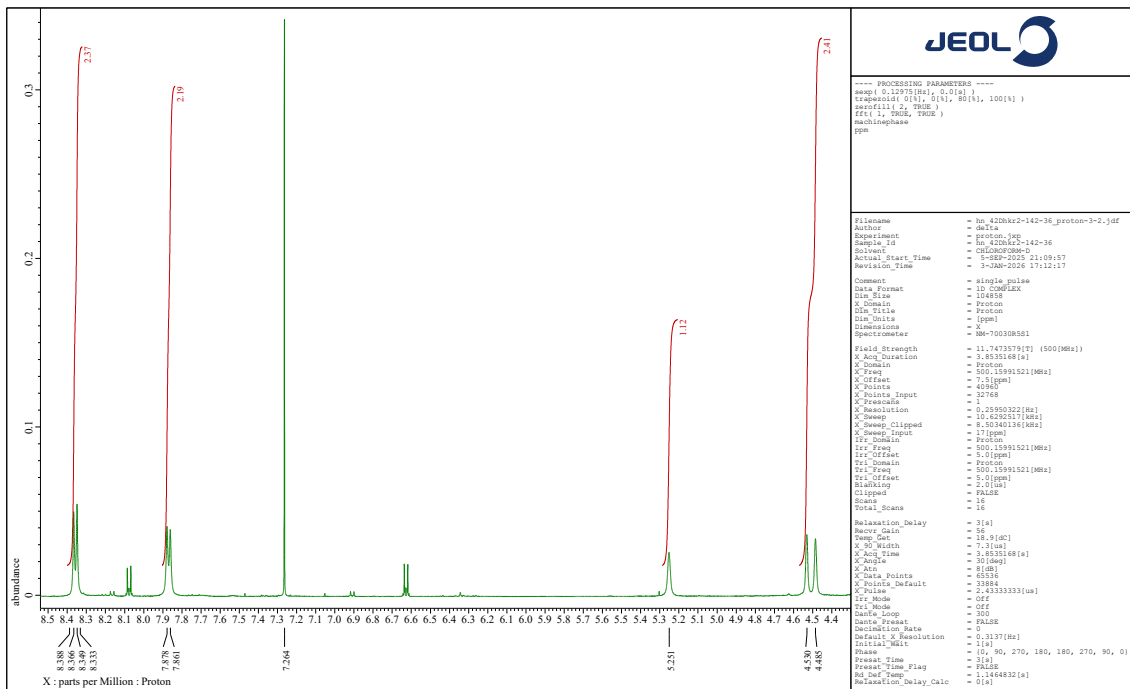


Figure S67. ^1H NMR (500 MHz, CDCl_3 , ppm) of **17**



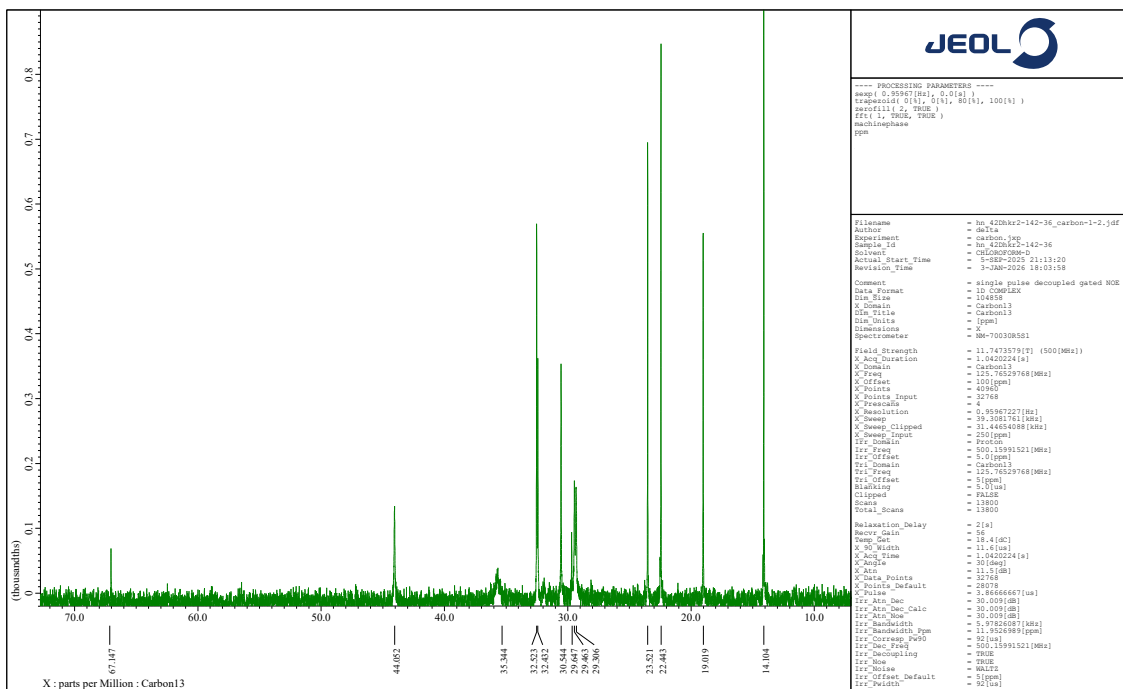
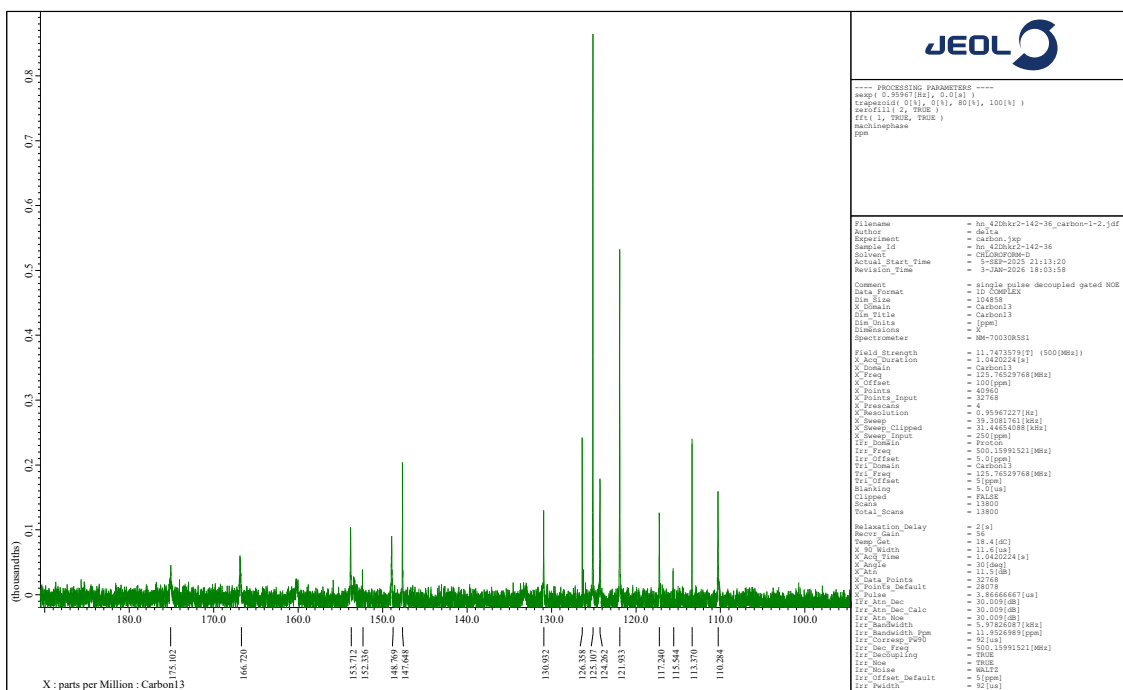


Figure S69. COSY spectrum of 17

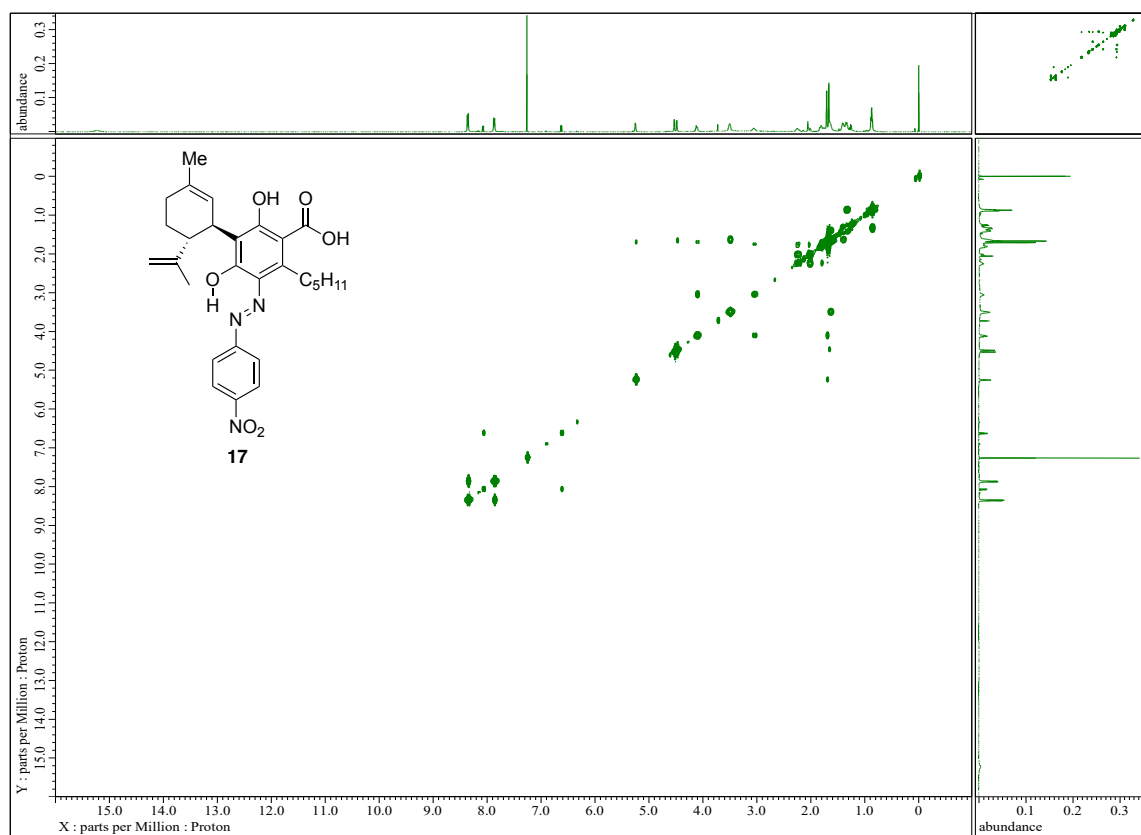


Figure S70. HSQC spectrum of 17

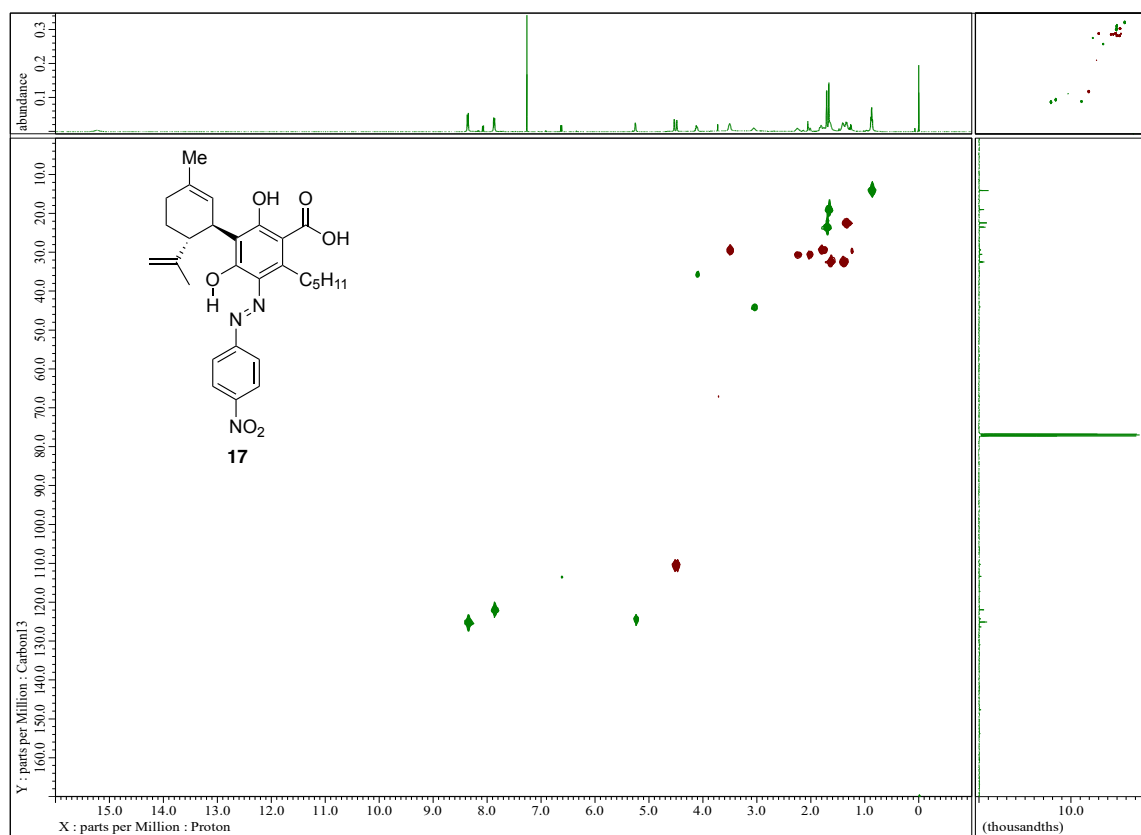


Figure S71. HMBC spectrum of 17

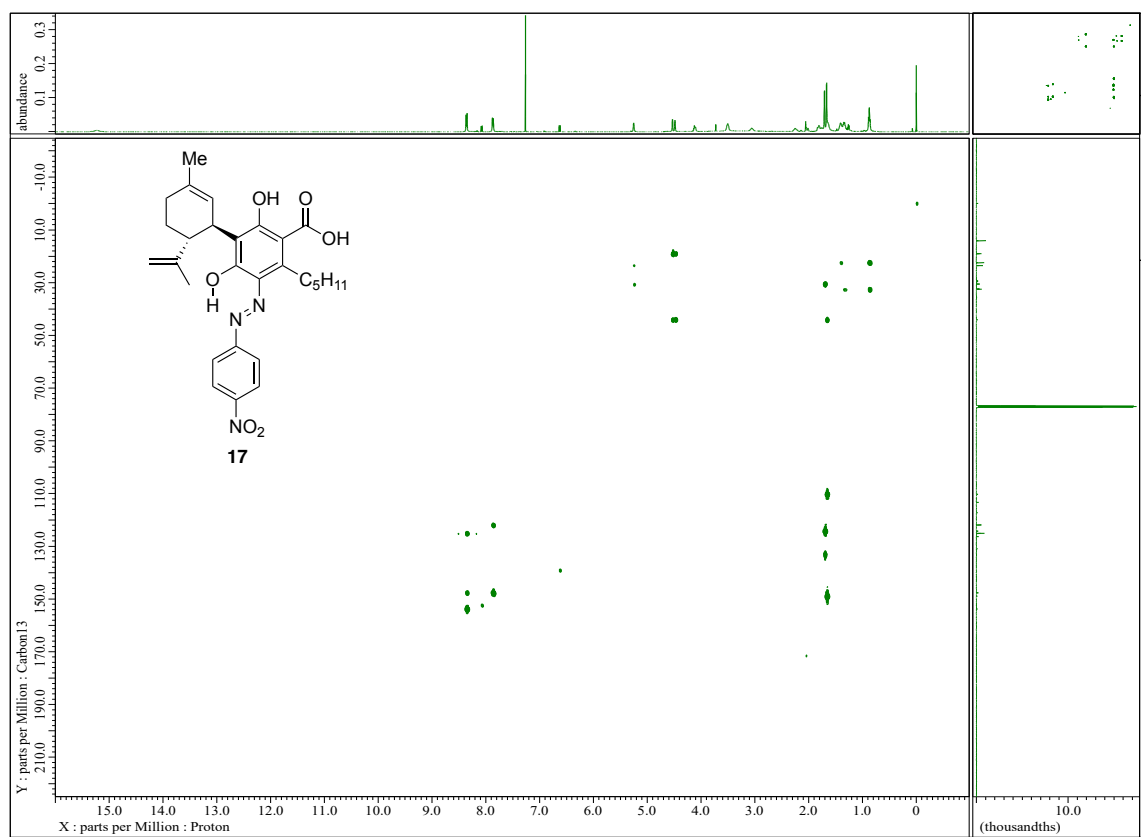


Figure S72. NOESY spectrum of 17

